

# REPORT ON FINE GRID SAMPLING PLAN (FOR TCDD AND 2, 3, 7, 8-TCDD) Volume One

Hercules Incorporated Wilmington, Delaware

IT Corporation
Knoxville, Tennessee

# REPORT ON FINE GRID SAMPLING PLAN (FOR TCDD AND 2,3,7,8-TCDD) JACKSONVILLE, ARKANSAS

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Submitted to:

HERCULES INCORPORATED Wilmington, Delaware

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# REPORT ON FINE GRID SAMPLING PLAN (FOR TCDD AND 2,3,7,8-TCDD) JACKSONVILLE, ARKANSAS

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#### ATTACHMENTS

- "A Sampling Strategy for Clean-up of Dioxin in Soil," J.H. Exner, R.O. Gilbert, and R.R. Kinnison, submitted to Environmental Emergency Services Company, July 1984.
- 2. "Rapid Determination of TCDD in Soil and Sediment Using Gas Chromatography and Tandem Mass Spectrometry," U.S. Environmental Protection Agency, Region VII, March 1986.

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- "USEPA Contract Laboratory Program Statement of Work (SOW) for Rapid Turnaround Dioxin Analysis Multi-Media," November 1986.
- 4. "Regional Technical Assistance for Preparing Quality Assurance Project and Laboratory Plans", Steven R. Lemons, ROQA-005/85, revised January, 1986, Office of Quality Assurance, Environmental Services Division, USEPA, Region VI.

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5. Sample Documentation Forms.

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#### 1.0 INTRODUCTION AND SUMMARY

In order to comply with the soil and sediment sampling and analytical provisions of an Administrative Order on Consent (Order) between itself and the U.S. Environmental Protection Agency, Region VI, Hercules Incorporated contracted with IT Corporation, a wholly-owned subsidiary of International Technology Corporation, to collect soil and sediment samples in the Vertac off-site areas of Jacksonville, Arkansas and with TMS Analytical Services, Inc. to conduct analyses of the collected samples. The purpose of this sampling and analytical project was to determine the concentrations of tetrachlorodibenzo-p-dioxin (TCDD; dioxin) if any, in soil and sediment in the Vertac offsite areas. The results of this soil and sediment sampling and analytical effort are reported in this document.

Results of analyses of fish from Lake Dupree for 2,3,7,8-TCDD are reported in a separate document as required by the Order.

Results of analyses of sediment samples collected from the basin and ponds of the old sewage treatment plant (STP) for non-dioxin analyses, which were not part of the Order, are also reported in a separate document.

In the past, the Vertac plant in Jacksonville manufactured and/or formulated pesticides, including phenoxy herbicides. These products, manufacturing by-products and waste products are suspected of having contaminated Rocky Branch Creek, which flows through and forms portions of the east and west boundaries of the plant, the City of Jacksonville's old sewage treatment plant (STP; West Wastewater Treatment Plant) and parts of its sewage collection system, Lake Dupree, and Bayou Meto which receives water from Rocky Branch Creek. Past sampling by various organizations had detected dioxin contamination in these areas.

As both Rocky Branch Creek and Bayou Meto are known to flood during periods of heavy rain, the present sampling effort was designed to obtain information about areas located in the flood plains of both bodies of water. Locations selected for sampling were west and east legs of Rocky Branch Creek, residential and non-residential land immediately adjacent to and within the legs of the creek,

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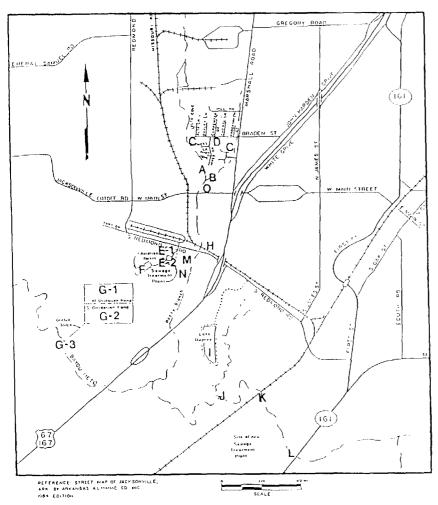
south of the Vertac plant, and Bayou Meto. Areas within and contiguous to the old sewage treatment plant and surface areas in the residential area immediately adjacent to manholes which are part of the sewage collection system were also included in the sampling plan. Lake Dupree and several other miscellaneous areas were also examined during this project. An overview of the areas in Jacksonville included in this sampling/analytical effort are shown in Figure 1.

During this project several sample collection techniques were used depending upon the area being sampled. In many of the areas, several individual aliquots of soil or sediment were composited to form one sample for analysis. A composite sample was formed with aliquots taken from sections (grids) with a maximum size of 5000 square feet. In other areas a single sample (grab sample) was collected and submitted for analysis. When concentrations of TCDD of 1 ppb (parts per billion) or greater were found in a sample from any section, samples taken from an immediately adjacent section were analyzed. If these samples contained concentrations of TCDD of 1 ppb or greater then sampling was performed in the next immediately adjacent section until a non-contaminated section was reached. This sequential sampling and analysis was done to delineate the extent of contamination.

During the field sample collection portion of this project, over 450 soil or sediment samples, either composite or grab samples were collected. Of these, over 300 samples were submitted for analysis for TCDD by semi-isomer specific procedures. When analytical results showed that the TCDD concentration in a sample was equal to or greater than 1 ppb, that sample was also analyzed for the specific 2,3,7,8-TCDD isomer.

Most soil or sediment samples from the areas involved in the sampling program had TCDD concentrations less than 1 ppb; over half the soil and sediment samples analyzed had TCDD concentrations less than 0.300 ppb.

One of the areas where TCDD concentrations of 1 ppb or greater were found was in the top sludge of a section of the aeration basin (Figure 1, Area F) and the sludge drying beds of the STP (Figure 1, Area E1); the highest concentration of 2,3,7,8-TCDD found was 2.8 ppb. Other soil and sediment samples from locations within the STP (Figure 1, Areas G1/G2) and in the Bayou Meto at the outfall of



# AREA DESCRIPTIONS

A = W ROCKY BRANCH (BANK ELEVATIONS)

B = E. ROCKY BRANCH (BANK ELEVATIONS)

C = ROCKY BRANCH (FINE GRID ALONG HANK)

D = RESIDENTIAL AREA (GROSS GRID)

E = OLD SEWAGE TREATMENT PLANT (STP)

F = AERATION BASIN AT STP

G = OXIDATION PONDS AT STP 8 BAYOU METO AT OUTFALL OF OXIDATION PONDS

II = MANHOLE #2043 BY SOUTH REDMOUD RD

I = LAKE DUPREE

( = BAYOU METO (BANK FLEVATION )

M = N = DRY CREEK BEDS

O = MOUND AT ROCKY BRANCH & WEST MAIN STREET



the STP (Figure 1, Area G3) contained less than 0.300 ppb of TCDD. Soil from two dry creek beds located between the eastern side of the STP and Rocky Branch Creek (Figure 1, Areas M and N) also contained less than 0.300 ppb TCDD.

Soil from some locations of Area C (Figure 1) adjacent to the west leg of Rocky Branch Creek were found to have concentrations of TCDD ranging from 1 to 3 ppb. These locations along the west leg were the yards of three residences (2202 and 2203 Braden Street and 2112 West Lane) and portions of a wooded area south of this residential area. On the east leg of Rocky Branch Creek, the only location where soil was found to contain TCDD concentrations greater than 1 ppb was in the yard of 1704 Hill Road and land immediately to the north (Vertac plant property). Concentrations of 2,3,7,8-TCDD in soil in the 1704 Hill Road yard ranged from less than 0.300 ppb to 12 ppb; a ditch just north of this property contained 54 ppb 2,3,7,8-TCDD.

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Soil from all other locations in the residential area (Figure 1, Areas C and D), including areas around manholes, and the wooded area along the east leg of Rocky Branch Creek contained less than 1 ppb TCDD. In addition, soil from the banks of the east leg of Rocky Branch Creek (Figure 1, Area B) and bottom sediment from the creek contained less than 1 ppb 2,3,7,8-TCDD. Due to analytical difficulties, data for soil from the banks of the west leg of the creek (Figure 1, Area A) are not confirmed. These data will be reported in a supplement to this report.

Soil from the banks of Bayou Meto (Figure 1, Areas J, K and L) and soil from the perimeter of and the sediment in Lake Dupree (Area I) contained less than 0.300 ppb TCDD.

Soil from two other locations sampled, an area around a manhole near Rocky Branch Creek and South Redmond Road (Figure 1, Area H) and a mound of dirt adjacent to Rocky Branch Creek and the West Main Street bridge (Figure 1, Area O), contained less than 0.300 ppb TCDD.

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2.0

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#### 2.0 SAMPLING AND ANALYTICAL PLAN SUMMARY

All sampling was conducted by the Field Analytical and Sampling (FAS) Division of IT Corporation according to the offsite sampling plans for the Vertac chemical site issued with the Order. Any deviation was fully documented, in accordance with the established quality assurance requirements (see Section 4.0 of this report). A representative of the EPA Region VI was present during the field effort in an oversight role as Remedial Project Manager (RPM).

#### 2.1 SAMPLING PROGRAM

An overview of the entire sampling area is shown in Figure 1. Specific sampling reference areas are designated by the letters A through 0; brief descriptions of each area are given in the legend. With the approval of the EPA RPM, two sampling area designations (N and O) were added to those initially described in the sampling plans.

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In order to determine representative concentrations of TCDD over a large area as quickly and efficiently as possible, certain field sample aliquots were composited for analysis. The compositing technique used is described in Section 3.0 and the strategy for collecting sample aliquots for compositing is described in Section 5.0 of this report. Sampling strategies included fine grid sampling and compositing based on "A Sampling Strategy for Clean-up of Dioxin in Soil" (Attachment 1), gross grid random grab sampling, and individual grab sampling.

A total of 526 samples were collected between June 28 and August 12, 1988; one gross grid sample was collected on September 7, 1988. These samples included soil, sediment, quality control (QC) samples and soil and sediment samples split with EPA. Table A-1 (Appendix A) lists all the samples collected in numerical order. The table shows the date sampled, the sample location description, QC code, composite information, the analysis requested, the laboratory that performed the analysis and the analytical status of each sample. Section 9.0 of this report contains tables defining the abbreviations and codes used in Table A-1.

#### 2.2 ANALYTICAL PROGRAM

A total of 356 samples, excluding splits, were analyzed for TCDD on a 48 hour turnaround basis at TMS Analytical Services, Inc., Indianapolis, Indiana. The analytical procedure used was a semi-isomer specific analysis for 2,3,7,8-TCDD by high resolution gas chromatography/tandem mass spectrometry (GC/MS/MS) (Attachment 2). This method was intended to be used when analytical results are required rapidly. Results of the semi-isomer specific analyses are reported as not detected if concentrations of TCDD of 0.3 ppb or less are found. Samples with TCDD equal to or greater than 1.0 ppb were routinely re-analyzed using high resolution gas chromatography/low resolution mass spectrometry for 2,3,7,8-TCDD only. For re-analysis, either the extract prepared for the initial GC/MS/MS analysis was used or, when necessary, a new extract was prepared from the soil or sediment sample by procedures described in Section III of Attachment 3.

Some samples were held in storage (archive status) until results of samples from adjacent sections were received. If analytical results for the initially analyzed samples showed 1 ppb or greater TCDD concentrations, then samples from the immediately adjacent sections were submitted for analysis. When necessary, additional samples were collected.

The specific sampling program and a summary of the analytical results for each area are given in Section 5.0. In this section the areas are ordered by their reference letter with related areas combined in a single subsection. Maps and tables have been used to present the sample locations and the analytical results. Table A-2 (Appendix A) lists in numerical order all of the samples submitted for TCDD analysis, including quality control samples, along with complete field information and the semi-isomer specific TCDD and 2,3,7,8-TCDD results.

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#### 3.0 GENERAL SAMPLING METHODOLOGY

During the field effort, soil and sediment samples were collected by the procedures detailed below. For any sample that required a sampling procedure deviating from those described, the exact procedure used was documented in the field logbook and the deviation has been noted in the appropriate section of this report. The procedures used to decontaminate sampling equipment are described in Section 6.0.

#### 3.1 SOIL SAMPLING PROCEDURE

A 3/4" hollow stainless steel sampling probe was used to collect each soil core. The depth of take for each core was zero to three inches. Coarser fragments or grasses were not included in the sample. If rocks in the sample area precluded the use of the sampling probe, a stainless steel spoon was used to collect loose soil around the rocks. After collection, each soil aliquot was placed in an aluminum pan for compositing (if required) then the sample was transferred to a glass jar with a stainless steel scoop or spoon and the jar sealed with a teflon-lined lid.

# 3.2 SEDIMENT SAMPLING PROCEDURES

Sediment samples were collected using three different techniques, approved by the EPA RPM, depending on the type of sediment.

## 3.2.1 Pond Sediment: Sludge

The top sediment (or sludge) in each pond, basin or lake was collected using an Eckman dredge. The open dredge was lowered from a boat until it settled on top of the sludge, then the closing mechanism was triggered trapping sample material inside. The dredge was retrieved and water was drained out of the dredge. A stainless steel spoon or scoop was used to transfer the sample to an aluminum pan for compositing (if required) or directly to the glass sample jar.

# 3.2.2 Pond Sediment: Interface

Samples containing the interface between the bottom sediment and the clay bottom of each pond or basin were collected using a 2-1/2" diameter piston-type bed-material hand sampler. The sampler was forced through the sludge with the piston fixed in a closed position preventing material from entering the sampler.

When the sampler reached the interface with the clay bottom it was augered into the clay layer forcing the piston upward and trapping some bottom sediment with the clay core. After the piston was offset one to by three inches it was pulled up creating a vacuum and locking the core in place. The sampler was withdrawn and the core extruded into an aluminum pan for compositing. Each core contained a distinct layer of bottom sediment interfacing with a layer of clay bottom.

#### 3.2.3 Stream Sediment

Each stream sediment sample was collected from the bottom of Rocky Branch Creek at mid-stream using a stainless steel spoon. For this field effort, the stream bed happened to be nearly dry in each area of stream sediment sampling.

### 3.3 SAMPLE COMPOSITING PROCEDURE

As each soil or sediment aliquot was collected, it was placed in a rectangular aluminum pan. All aliquots for one composite sample were approximately the same mass. Once all the aliquots for one composite sample were collected the soil/sediment was mixed thoroughly with gloved hands or a stainless steel spoon until homogeneous. Rocks, sticks, insects, grass and other coarse fragments were removed from the pan. After mixing, an imaginary grid was drawn on the pan, dividing it into four or six equal sections. An aliquot was taken from each section moving in a clockwise direction and placed into a glass sample jar. The contents of the pan were mixed again, and four or six more portions were placed into the sample jar. This procedure was repeated until approximately 35 grams were collected in the sample jar. The sample jar was sealed with a teflon-lined lid.

#### 3.4 SAMPLE COLLECTION FOR MULTIPLE ANALYSES

Although not within the provisions of the Order, Hercules Incorporated consented to the request of the EPA for collection and analysis of sludge (top sediment) samples from the Aeration Basin (Area F) and Oxidation Ponds (Area G1/G2) of the STP for priority pollutants, pesticides, herbicides and metals and for characterization. Some of these samples were submitted for TCDD analysis as well as the analyses noted above. For these samples, additional sample containers (the number and volume of containers was dependent upon the analyses requested) were filled immediately after filling the glass sample jar for TCDD analysis using

the same procedure described above. The sampling information and analytical results of the samples analyzed for parameters other than dioxin are discussed in a separate document.

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# 4.0 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

The quality assurance (QA) goal for this program was to ensure that all information, data and documentation were technically sound, statistically valid and properly documented. In order to accomplish this goal, certain field quality control (QC) activities were performed along with the regular field sample collection activities described in earlier sections. A description of these QC activities and a summary of the ensuing results are presented in this section.

4. 2

#### 4.1 CONTROL OF DEVIATIONS

Any deviations or additions to the sampling methods detailed in the sampling plans were justified and approved by the EPA Remedial Project Manager (RPM) prior to the commencement of sampling. All deviations were carefully documented in the field logbook or in a correspondence from the EPA RPM to Hercules Incorporated, so the procedure could be repeated if necessary.

# 4.2 QUALITY CONTROL SAMPLES

Quality control samples included soil blanks, trip blanks, equipment rinsates, duplicate samples and composite mixture check samples. The total number of QA/QC samples analyzed represented a frequency of over 25 percent with respect to the number of field samples collected for analysis. In addition, approximately 10 percent of the total number of samples submitted for analysis were split with the EPA for an additional, external QA/QC check.

# 4.2.1 Soil Blanks

The sample material used for soil blanks or background samples was collected from the North Vandenburg Boulevard bridge, one-quarter mile west of John Harden Drive and south of the culverts at the Little Rock Air Force Base boundary. Collection of a large quantity of soil was performed following the same procedures previously documented, with the exception that no compositing was performed. The background sample material had characteristics similar to soil collected in the sampling program. Periodically throughout the sampling effort, a sample jar was filled with background soil and submitted as a blank, blind to the laboratory, along with a regular sample shipment. A total of eleven soil blanks were submitted for analysis. All of the soil blanks analyzed were reported as "not detected" at a level of 0.300 parts per billion (ppb) TCDD (see Table A-2, Appendix A).

# 4.2.2 Trip Blanks

A trip blank consisted of a 40-ml glass vial filled with pesticide-grade hexane, transported to the field, and periodically included with a shipment of site samples to the laboratory for analysis. The purpose of the blank was to monitor potential cross-contamination of the samples during handling and shipment. Ten trip blanks were submitted for TCDD analysis and all were reported as "not detected" at a level of 0.300 nanograms per sample. Analytical results for trip blanks are presented in Table A-2, Appendix A.

# 4.2.3 Equipment Rinsate Blanks

Equipment rinsate blanks were collected to verify the effectiveness of sampling equipment decontamination procedures and to monitor potential cross-contamination between samples. The rinsate collection procedure consisted of decontaminating the sampling tool according to the routine procedure described in Section 6.0, FIELD DECONTAMINATION OF SAMPLING EQUIPMENT, followed by pouring pesticide-grade hexane over the surfaces of the tool that interface with sample material during collection. The hexane rinsate was then collected in a glass jar with a teflon-lined lid.

A total of nineteen equipment rinsate blanks were submitted for TCDD analysis. All but one of the rinsates were reported as "not detected" at a detection level of 0.300 nanograms per sample. Rinsate sample number WH2240 showed 0.58 ng of TCDD per sample (see Table A-2, Appendix A).

This contaminated rinsate was a composite of two rinses, one performed on each of the two soil sampling probes after sampling a fine grid around manhole number 2735. The soil samples collected with each of these probes prior to and immediately after the rinsate was collected were all reported as "not detected" at 0.300 ppb TCDD level. Another equipment rinse composite was collected ten samples later; it was also "not detected" for TCDD. Upon the request of Hercules Incorporated, sample WH2240 was re-analyzed by the laboratory; the second result showed 0.61 ng of TCDD confirming the initial analysis. However, it is apparent from the data that samples taken following the positive equipment rinsate blank were unaffected by any contamination (see Table A-2, Appendix A).

#### 4.2.4 Field Duplicates

Field duplicate samples were collected to determine the reproducibility of the sampling procedures as well as the reproducibility of the analytical procedures. Duplicate samples were collected periodically throughout the sampling effort to represent the different types of samples and the different sample collection procedures (i.e. soils/sediment samples, grab and fine grid composite samples).

Samples selected for preparation as duplicates were collected according to the procedures described in Section 3.0. Portions were then taken for the original sample, the remaining sample material was re-mixed, and then portions were taken for the duplicate sample. Each duplicate sample was given a unique sample number so that its relationship with the original sample would be unknown to the laboratory.

A total of 24 field duplicate samples were submitted for analysis. The duplicate and original sample results are reported along with all other field samples in the summary tables in appropriate sections of Section 5.0 and in Table A-2, Appendix A. Duplicate samples are indicated by the code "QDU" and original samples are indicated by the code "ORIG". A duplicate pair can be matched by cross-referencing the sample numbers. It is important to note that variation in analytical results between a duplicate and original sample can represent any variation that could have occurred during sample collection, sample handling and shipping, preparation for analysis, and analysis as well as variation inherent in the analytical method.

Tables 1 and 2 present a summary of the analytical results for the duplicate samples for TCDD and 2,3,7,8-TCDD. Relative percent differences (RPDs) have been calculated according to the following equation:

RPD = 
$$\frac{|D_1 - D_2|}{\left(\frac{D_1 + D_2}{2}\right)} \times 100$$

 $D_1$  = original measurement  $D_2$  = duplicate measurement

Table 1. Field Duplicate Results Summary TCDD

Original Sample Number	Duplicate Sample Number	Sample Type	Original Result (ppb)	Duplicate Result (ppb)	RPD (%)
WH1411	WH1412	Soil	0.569	0.489	15
WH1449	WH1412 WH1450	Soil	0.304	ND(0.3)	a
WH1467	WH1468	Soil	ND(0.3)	ND(0.3)	b
WH1490	WH1493	Sof1	ND(0.3)	ND(0.3)	b
WH2026	WH2027	Soil	4.75	2.843	50
WH2039	WH2040	Soil	1.308	1.65	23
WH2045	WH2046	Sediment	ND(0.3)	ND(0.3)	b
WH2065	WH2066	Soil	ND(0.3)	ND(0.3)	Ь
WH2092	WH2093	Soil	1.727	1.443	18
WH2103	WH2104	Soil	0.631	0.629	0.3
WH2149	WH2156	Soil	ND(0.3)	ND(0.3)	b
WH2149	WH2157	Soil	ND(0.3)	ND(0.3)	b
WH2190	WH2191	Soil	ND(0.3)	ND(0.3)	Ď
WH2209	WH2210	Sediment	ND(0.3)	ND(0.3)	Ď
WH2222	WH2226	Sediment	2.840	2.336	19
WH2229	WH2232	Core	ND(0.3)	ND(0.3)	Ь
WH2314	WH2316	Soil	2.849	2.814	1.2
WH2321	WH2324	Soi1	1.775	2.388	29
WH2329	WH2332	Soil	3.465	2.863	19
WH2340	WH2341	Sediment	ND(0.3)	ND(0.3)	ď
WH2345	WH2347	Soi1	ND(0.3)	ND(0.3)	b
WH2349	WH2351	Soil	ND(0.3)	ND(0.3)	ь
WH2355	WH2357	Soil	11.577	5.ì28	77

aRPD cannot be calculated.

 $<sup>^{\</sup>mbox{\scriptsize b}}\mbox{\scriptsize RPD}$  cannot be calculated; however, the two results do indicate that reproducibility has been demonstrated.

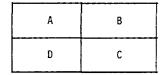
Table 2. Field Duplicate
Results Summary
2,3,7,8-TCDD

Original Sample Number	Duplicate Sample Number	Sample Type	Original Result (ppb)	Duplicate Result (ppb)	RPD (%)
WH2039	WH2040	Soil	1.33	1.85	33
WH2092	WH2093	Soil	1.66	1.41	16
WH2222	WH2226	Sediment	2.83	1.07	90
WH2321	WH2324	Soil	1.88	2.30	20
WH2329	WH2323	Soil	3.34	2.78	18
WH2355	WH2357	Soil	11.65	5.1	78
WH2026	WH2027	Soil	2.36	2.79	17
WH2314	WH2316	Soil	3.09	2.69	14

Only one of the TCDD RPDs and two of the 2,3,7,8-TCDD RPDs are above 50 percent. Including the outlying result, the average RPD for TCDD is  $25(\pm23)$ ; excluding this result the average is  $19(\pm15)$ . Including the two outlying results, the average RPD for 2,3,7,8-TCDD is  $36(\pm30)$ ; excluding the outliers, the average is  $10(\pm7)$ . The EPA control limit for the RPD between duplicate TCDD measurements is <50%. As can be seen from the tables, the field duplicate samples showed, overall, acceptable reproducibility in both TCDD and 2,3,7,8-TCDD analyses.

#### 4.2.5 Composite Mixture Check Samples

Composite "mix" check samples were collected to evaluate the thoroughness of the mixing process during composite sample collection and to monitor any potential variation within the composited sample material. The "mix" check sample collection procedure consisted of taking the sample aliquots according to the appropriate procedure for a soil or sediment sample and compositing the aliquots as described in Section 3.3 SAMPLE COMPOSITING PROCEDURE. The aluminum pan used for mixing was then divided into four quadrants and the original sample collected by taking portions from each quadrant in a clockwise direction, as previously described and illustrated below:



Aluminum Pan containing composited soil or sediment  $\Box$ 

Without additional mixing, four "mix" check samples were then taken, one from each quadrant. Each "mix" check sample was given a unique sample number; the appropriate suffix (A,B,C or D) was appended for data management purposes. Mixture checks were performed on three composite samples for a total of 12 individual "mix" check samples submitted for analysis. Analytical results for these samples are included in appropriate summary tables in Section 5.0 and in Table A-2, Appendix A. Of these 12, eight "mix" checks and the corresponding original

samples were reported as "not detected" at 0.300 ppb TCDD. The remaining four "mix" checks and the corresponding original sample contained measurable amounts of TCDD. The results for these soil samples were as follows:

SAMPLE NUMBER	TOTAL TCDD (ppb)	QA/QC CODE	RPD FROM ORIG (%)	RPD FROM MEAN (%)
WH 2054 WH 2055A	•728 •857	ORIG ODM	16.3	16.2
WH 2056B	.820	ÖDM	11.9	20.6
WH 2057C	1.185	Q́DМ	47.8	16.1
WH 2058D	1.172	QDM	46.7	15.0

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RPD = Relative percent difference QDM - Composite mixture check sample

To determine the amount of variation between the original and each "mix" check sample, the RPD between them was calculated (as if each "mix" check and original were a duplicate pair). To evaluate the variation among the four quadrant samples the RPD between each "mix" check sample and the mean of all four "mix" check samples has been calculated and tabulated along with the results presented above. The EPA control limit for the RPD between duplicate TCDD measurements is <50%. As can be seen, both the differences between the concentration of each "mix" check sample and the original and the differences among the four "mix" check samples are within the EPA control limits.

#### 4.3 FIELD SPLIT SAMPLES

As an additional QA/QC check, over 10 percent of all field samples analyzed were split with the EPA. The samples to be split were selected by the EPA RPM, and were collected, composited (as required), and mixed by the routine procedure. Twice the normal volume was then placed into the original sample jar, the jar was shaken, and its contents were split by transferring half of the sample material to a second glass sample jar. The split sample was given a unique sample number. Cross-reference information identifying the original sample and the split sample was recorded on the sample collection log for each paired sample. The custody of all split samples was transferred to the EPA Field Investigative Team representative using EPA Chain-of-Custody procedures. A total of 32 split samples were collected during this field effort. Table A-3 in Appendix A lists all the split samples and the corresponding field information.

#### 5.0 SAMPLE AREA DESCRIPTIONS AND PRESENTATION OF ANALYTICAL RESULTS

This section contains a description of each sampling area and the specific sampling strategy used in that area. It also contains figures illustrating each area, showing the sample collection locations and the analytical results. Quality control sample results are not included in the figures; however, results of field duplicates and "mix" check samples are included in the summary table preceding each figure(s). All analytical results and other information for each sample are presented in numerical order in Table A-2, Appendix A.

# 5.1 AREAS A AND B: BANKS AND BOTTOM OF ROCKY BRANCH CREEK (WEST AND EAST LEGS)

Areas A and B comprise the sections of Rocky Branch Creek which border the residential area south of and adjacent to the Vertac Plant property. The areas extend from the Vertac property line to the confluence of the west and east tributaries. The west leg of the creek or main tributary is Area A; the east leg is Area B. Sampling was conducted in the following manner:

## <u>Soil</u>:

- The creek legs were divided into 500 feet sections for each composite sample.
- Samples were taken every 10 feet on the wall of the creek on each side of the creek, designated left and right bank facing upstream.
- Samples were taken 6" above water level; 12" above water level; 36" above water level. Initially only the 6" sample was analyzed. If concentrations at or above 1 ppb 2,3,7,8-TCDD were present then the samples from the next elevation were analyzed.

# Sediment: (collected at mid-stream)

 One bottom grab sample was taken in the west leg of Rocky Branch Creek at the southern boundary of the Vertac site, in the east leg of Rocky Branch Creek at the southern boundary of the Vertac site (1704 Hill Road property line), and the confluence of the two legs, for a total of 3 samples. Each sample was analyzed. Because of dry conditions resulting from a prolonged drought and to maintain a consistent reference elevation, a theoretical water level was established. An elevation bench mark was designated at the bridge over Rocky Branch at West Main Street. An arbitrarily established depth of one foot of water was measured at the concrete bridge abutment base. A transit level was used to determine the amount of fall evident from the fence at the plant site to the confluence of the east and west legs of Rocky Branch. A 9.5-foot drop was determined over the 2,230 feet involved in the sampling for the west leg. The entire length was surveyed and one foot water elevation markers (theoretical) were installed to reference the desired sample elevations. Water was present at most locations on the east leg; when dry areas were encountered, the techniques adopted for the west leg were utilized to establish a theoretical water level reference on the east leg.

The analytical results revealed that the soil samples from the east leg and the sediment samples from Rocky Branch Creek contained less than 1 ppb 2,3,7,8-TCDD. Table 3 and Figure 2 present the sample locations for Areas A and B along with the results for TCDD analyses and isomer-specific 2,3,7,8-TCDD analyses when applicable. Due to analytical difficulties, the data for soil samples from the west leg are not confirmed. Based upon an agreement between Hercules Incorporated and the EPA RPM, these data are not reported here. The data will be reported in a supplement to this report.

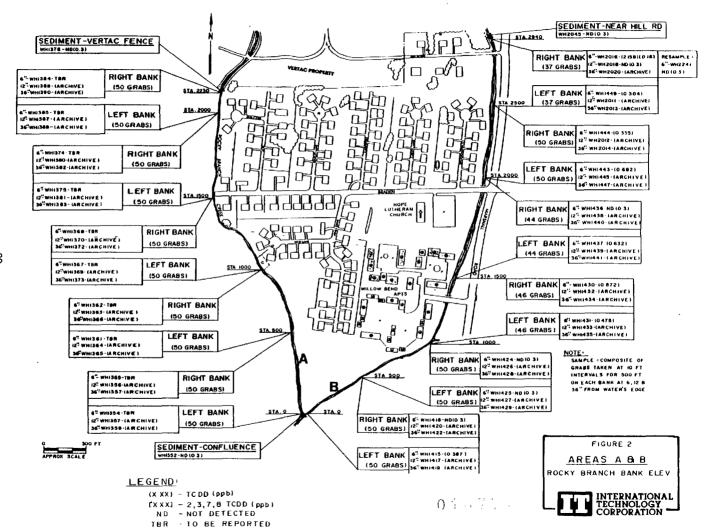
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AREAS A and B: BANKS AND BOTTOM OF WEST AND EAST LEGS OF ROCKY BRANCH CREEK SUMMARY OF RESULTS OF DIOXIN ANALYSES OF SOIL AND SEDIMENT SAMPLES

TABLE 3

Sample Number	Location	TCDD (ppb)	2,3,7,8- TCDD (ppb)
	AREA A: BANKS OF WEST LEG - SOIL		
WH1354	0 to 500 ft, Left Bank, 6 inches above water	TBR	TBR
WH1355	0 to 500 ft, Right Bank, 6 inches above water	TBR	TBR
WH1361	510 to 1000 ft, Left Bank, 6 inches above water	TBR	TBR
WH1362	510 to 1000 ft, Right Bank, 6 inches above water	TBR	TBR
WH1367	1010 to 1500 ft, Left Bank, 6 inches above water	TBR	TBR
WH1368	1010 to 1500 ft, Right Bank, 6 inches above water	TBR	TBR
WH1375	1510 to 2000 ft, Left Bank, 6 inches above water (ORIG)	TBR	TBR
WH1377	1510 to 2000 ft, Left Bank, 6 inches above water (QDU of MH1375)	TBR	TBR
WH1374	1510 to 2000 ft, Right Bank, 6 inches above water	TBR	TBR
WH1385	2010 to 2230 ft, Left Bank, 6 inches above water	TBR	TBR
WH1384	2010 to 2230 ft, Right Bank, 6 inches above water	TBR	TBR
	AREA B: BANKS OF EAST LEG - SOIL		
WH1415	10 to 500 ft, Left Bank, 6 inches above water	0.387	N/A
WH1418	10 to 500 ft, Right Bank, 6 inches above water	0.300 U	N/A
WH1425	510 to 1000 ft, Left Bank, 6 inches above water	0.300 U	N/A
WH1424	510 to 1000 ft, Right Bank, 6 inches above water	0.300 U	N/A
WH1431	1010 to 1500 ft, Left Bank, 6 inches above water	0.475	N/A
WH1430	1010 to 1500 ft, Right Bank, 6 inches above water	0.872	N/A
WH1437	1510 to 2000 ft, Left Bank, 6 inches above water	0.632	N/A
WH1436	1510 to 2000 ft, Right Bank, 6 inches above water	0.300 U	N/A
WH1443	2010 to 2500 ft, Left Bank, 6 inches above water	0.682	N/A
WH1444	2010 to 2500 ft, Right Bank, 6 inches above water	0.335	N/A
WH1449	2510 to 2940 ft, Left Bank, 6 inches above water (ORIG)	0.304	N/A
WH1450	2510 to 2940 ft, Left Bank, 6 inches above water (QDU of WH1449)	0.300 U	N/A
WH2016	2510 to 2940 ft, Right Bank, 6 inches above water	2.159	0.16
WH2241	2510 to 2940 ft, Right Bank, 6 inches above water, resample	0.300 U	N/A
WH2018	2510 to 2940 ft, Right Bank, 12 inches above water	0.300 U	N/A
	AREAS A and B; BOTTOM SEDIMENT		
WH1352	Confluence of East and West Legs	0.300 U	N/A
WH1378	Area A: West Leg Leg at Vertac fence	0.300 U	N/A
WH2045	Area B: East Leg at 1704 Hill property line (ORIG)	0.300 U	N/A
WH2046	Area B: East Leg at 1704 Hill propery line (QDU of WH2045)	0.300 U	N/A

D — Duplicate analytical sample
U — Not detected at stated concentration
N/A — Not applicable
ORIG — Original sample of quality control pair
QOU — Duplicate sample of quality control pair
TBR — To be reported in supplement to this report



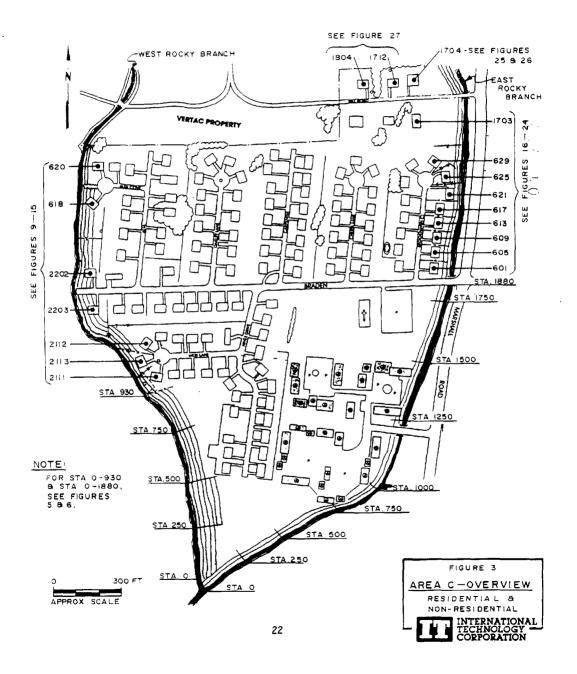
Area C encompasses a narrow strip of land immediately south of the Vertac Plant and adjacent to the east and west legs of Rocky Branch Creek. Area D includes all the residential property between the two creek tributaries. Fine grid sampling strategy was used in Area C while random grab sampling within a gross (large) grid was used in Area D. Figure 3 presents an overview of Area C showing the sampling stations of the wooded area near the creek confluence and the individual addresses sampled in the residential area. Detailed drawings for

specific locations are presented later in this document as noted in Figure 3.

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5.2 AREAS C AND D: ROCKY BRANCH CREEK (RESIDENTIAL AREA)

The fine grid sampling techniques were based on the document "A Sampling Strategy for Cleanup of Dioxin in Soil" (Attachment 1). Modifications were made at some specific sampling locations at the recommendation or with the approval of the EPA RPM. Two different basic grid plans were used for two sections within Area C. These sections are: 1) the wooded ("non-residential") section nearer the creek confluence south of 2111 West Lane on the west leg of Rocky Branch Creek and south of Braden Street on the east leg; and 2) the residential section just south of the Vertac property. Table A-2 (Appendix A) presents the field information and analytical results for all samples collected, listed in numerical order.



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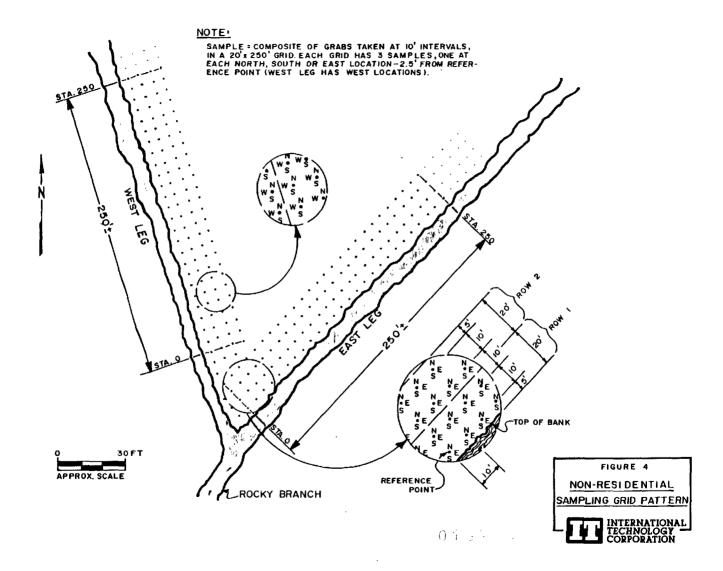
### 5.2.1 Area C: "Non-Residential" Wooded Area

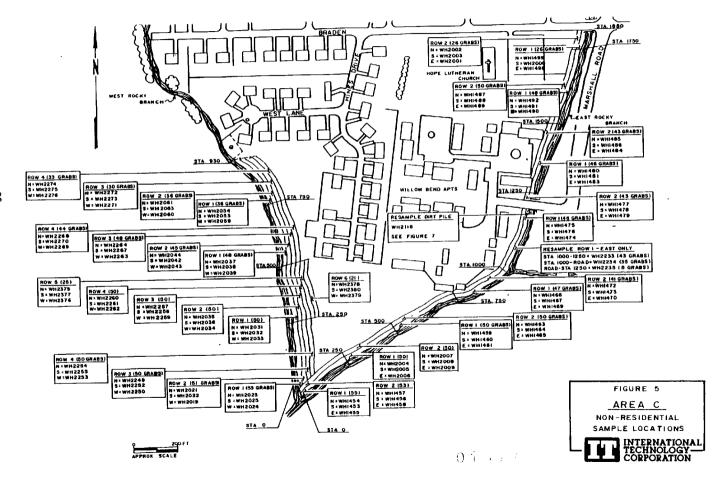
For the purposes of this report, the section of Area C where single-family residences are not actually located is defined as the "non-residential" section. Figure 4 diagramatically presents a typical sampling grid used in this section of Area C. Each grid unit (or row) was 20ft x 250ft (5000 sq.ft.). Each row was divided into 50 equal blocks of size 10 by 10 feet by setting up two lines parallel to the long axis of the row, 10 feet apart and 5 feet from each side of the row. Markers were then placed every 10 feet along these lines starting 5 feet from one end. Each marker was at the center of the 10 by 10 foot block as illustrated in the figure.

Three composite samples were obtained from each row according to the systematic pattern shown in Figure 4. Referring to the figure the letters N,S,E and W represent sample aliquot locations 2.5 feet to the north, south, east or west of the center markers (reference point) in each row. All north aliquots in one row were composited, all south aliquots in one row were composited and so forth, such that each row had three composite samples of 50 aliquots each, unless obstacles necessitated a modification. On the west leg of Rocky Branch the north, south, and west composite samples were collected; on the east leg, the north, south, and east composite samples were collected. Each collection of sample material was thoroughly mixed and homogenized as described in Section 3.3 SAMPLE COMPOSITING PROCEDURE.

During the surveying of the sampling grid units, the confluence of the east and west legs of Rocky Branch was designated as Station O (Zero). At 250-foot increments, subsequent stations were marked moving upstream on each leg of the creek (See Figure 5).

Initially, two adjacent rows between each station were surveyed and sampled. The rows were identified as Row 1 (adjacent to the creek) and Row 2 (further into the wooded area). All three composite samples collected from Row 1 were analyzed first; if the results for any composite were above 1 ppb TCDD, then that composite sample was analyzed for 2,3,7,8-TCDD to confirm the level of contamination and composite samples from Row 2 were analyzed for TCDD. If results from Row 2 were again above 1 ppb, the EPA RPM recommended sampling two additional rows further into the wooded area, in that same 250 foot section.





0.5 - 7 - 5.0

These samples were submitted for analysis one row at a time and sampling continued until composite sample results showed less than 1 ppb TCDD. Each sample with results of 1 ppb or greater for TCDD was analyzed for the specific 2,3,7,8-TCDD isomer using high resolution GC/low resolution MS. Any sample not required for analysis was maintained in secured storage under archive status. Figure 5 shows all the grid units that were sampled during this field effort and the three sample numbers associated with each unit or row.

Table 4 and Figure 6 present data for soil samples collected from this "non-residential" area along the west leg of Rocky Branch Creek. Low levels of dioxin, ranging from less than 0.300 ppb to 2.9 ppb were found in sections of this land closest to the creek. For each section, the extent of contamination was delineated by the results from the eastern-most portion sampled which were all less than 1 ppb dioxin.

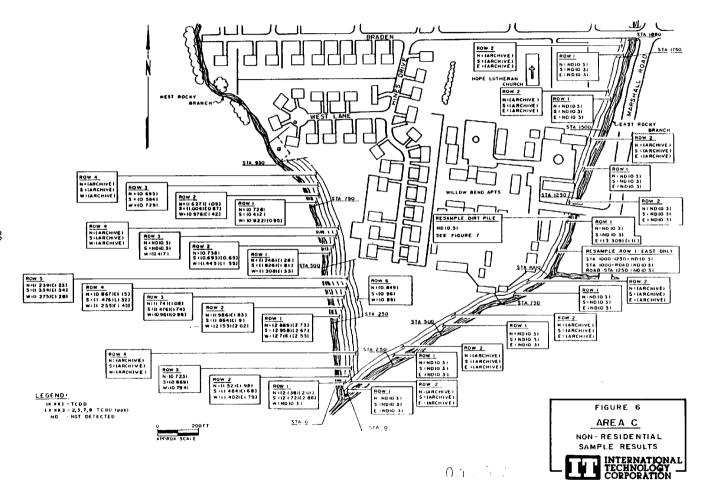
Table 5 and Figure 6 present data for soil samples collected from the area adjacent to the east leg of Rocky Branch Creek. All soil samples taken from sections along the east leg had less than 0.300 ppb dioxin, except for one of three composites taken from Row 1 between Station 1000 and 1250. This particular unit had some unusual physical features; it was divided by a road and it contained a large mound of fill dirt on the bank of the creek just south of the road. In an attempt to isolate the source of the TCDD found in the east composite sample, Row 1 was re-sampled (the east aliquot locations only) in its original linear run, excluding the mound of dirt adjacent to the creek, and was divided into two sections north and south of the road for two additional sample composites.

Sample WH2233 was collected from the full row, sample WH2234 was collected from Station 1000 to the road, and sample WH2235 was collected from the section between the road and station 1250. Aliquots from the mound of fill dirt were not added to any of these samples because it appeared to have been from another location.

TABLE 4 AREA C ~ "NON-RESIDENTIAL" WOODED AREA ALONG WEST LEG OF ROCKY BRANCH CREEK SUMMARY OF RESULTS OF DIOXIN ANALYSES OF SOIL SAMPLES

Sample Number	Location	TCDD (ppb)	2,3,7,8- TCDD (ppb)
WH2023	0 to 250 ft, Row 1: North	2.138	2.01
WH2025	0 to 250 ft, Row 1: South	2.172	2.88
WH2024	0 to 250 ft, Row 1: West	0.300 U	N/A
WH2021	0 to 250 ft, Row 2: North	1.520	1.98
WH2022	0 to 250 ft, Row 2: South	1.484	1.68
WH2019	0 to 250 ft, Row 2: West	1.402	1.79
WH2249	0 to 250 ft, Row 2: Nest	0.723	N/A
WH2252	0 to 250 ft, Row 3: South	0.869	N/A
WH2250	0 to 250 ft, Row 3: West	0.794	N/A
WH2031	250 to 500 ft, Row 1: North	2.889	2.73
WH2032	250 to 500 ft, Row 1: South	2.958	2.67
WH2033	250 to 500 ft, Row 1: West	2.716	2.53
WH2035	250 to 500 ft, Row 2: North	1.986	1.83
WH2036	250 to 500 ft, Row 2: South	1.864	1.90
WH2034	250 to 500 ft, Row 2: West	2.153	2.02
WH2257	250 to 500 ft, Row 3: North	1.740	1.08
WH2258	250 to 500 ft, Row 3: South	1.476	1.74
WH2259	250 to 500 ft, Row 3: West	0.961	0.96
WH2260	250 to 500 ft, Row 4: North	0.867	1.15
WH2261	250 to 500 ft, Row 4: South	1.476	1.32
WH2262	250 to 500 ft, Row 4: West	1.255	1.45
WH2375	250 to 500 ft, Row 5: North	1.239	1.23
WH2377	250 to 500 ft, Row 5: South	1.334	1.34
WH2376	250 to 500 ft, Row 5: West	1.275	1.28
WH2378	250 to 500 ft, Row 6: North	0.849	N/A
WH2380	250 to 500 ft, Row 6: South	0.960	N/A
WH2379	250 to 500 ft, Row 6: West	0.890	N/A
WH2037	500 to 750 ft, Row 1: North	1.246	1.26
WH2038	500 to 750 ft, Row 1: South	1.826	1.81
WH2039	500 to 750 ft, Row 1: West (ORIG)	1.308	1.33
WH2040	500 to 750 ft, Row 1: West (QDU of MH2039)	1.650	1.85
WH2044	500 to 750 ft, Row 2: North	0.738	N/A
WH2042	500 to 750 ft, Row 2: South	0.693	0.65
WH2043	500 to 750 ft, Row 2: West	1.445	1.55
WH2264	500 to 750 ft, Row 3: North	0.300 U	N/A
WH2267	500 to 750 ft, Row 3: South	0.300 U	N/A
WH2263	500 to 750 ft, Row 3: West	0.417	N/A
WH2054	750 to 930 ft, Row 1: North 750 to 930 ft, Row 1: North (QDM of WH2054) 750 to 930 ft, Row 1: North (QDM of WH2054) 750 to 930 ft, Row 1: North (QDM of WH2054) 750 to 930 ft, Row 1: North (QDM of WH2054) 750 to 930 ft, Row 1: South 750 to 930 ft, Row 1: South	0.728	N/A
WH2055A		0.857	N/A
WH2056B		0.820	N/A
WH2057C		1.185	1.18
WH2058D		1.172	1.23
WH2053		0.412	N/A
WH2059		0.922	0.95
WH2061	750 to 930 ft, Row 2: North	1.627	1.09
WH2063	750 to 930 ft, Row 2: South	1.004	0.87
WH2060	750 to 930 ft, Row 2: West	0.976	1.42
WH2272	750 to 930 ft, Row 3: North	0.695	N/A
WH2273	750 to 930 ft, Row 3: South	0.584	N/A
WH2271	750 to 930 ft, Row 3: West	0.729	N/A

Measurement of distances begins at the junction of the West and East Legs; see Fig. 4, 5 and 6. U - Not detected at stated concentration N/A - Not applicable ORIG - Original sample of quality control pair QDU - Duplicate sample of quality control pair QDM - Composite mixture check



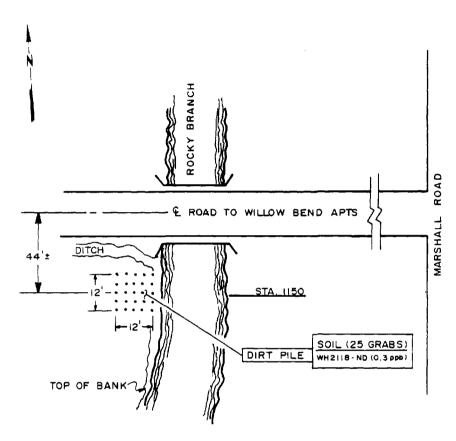
AREA C: "NON-RESIDENTIAL" WOODED AREA ALONG EAST LEG OF ROCKY BRANCH CREEK SUMMARY OF RESULTS OF DIOXIN ANALYSES OF SOIL SAMPLES

Sample Number	Location	TCDD (ppb)	2,3,7,8- TCDD (ppb)
WH1454	0 to 250 ft, Row 1: North	0.300 U	N/A
WH1453	0 to 250 ft, Row 1: South	0.300 U	N/A
WH1455	0 to 250 ft, Row 1: East	0.300 U	N/A
WH2004	250 to 500 ft, Row l: North	0.300 U	N/A
WH2005	250 to 500 ft, Row l: South	0.300 U	N/A
WH2006	250 to 500 ft, Row l: East	0.300 U	N/A
WH1459	500 to 750 ft, Row 1: North	0.300 U	N/A
WH1460	500 to 750 ft, Row 1: South	0.300 U	N/A
WH1461	500 to 750 ft, Row 1: East	0.300 U	N/A
WH1466	750 to 1000 ft, Row 1: Worth	0.300 U	N/A
WH1467	750 to 1000 ft, Row 1: South (ORIG)	0.300 U	N/A
WH1468	750 to 1000 ft, Row 1: South (QDU of WH1467)	0.300 U	N/A
WH1469	750 to 1000 ft, Row 1: East	0.300 U	N/A
WH1475 WH1476 WH1474 WH2233 WH2234 WH2235 WH2118	1000 to 1250 ft, Row 1: North 1000 to 1250 ft, Row 1: South 1000 to 1250 ft, Row 1: East 1000 to 1250 ft, Row 1: East, resample 1000 to 1250 ft, Row 1: East, resample 1000 to 1250 ft, East, 1000 ft to road 1000 to 1250 ft, East, road to 1250 ft Dirt pile at fence corner between Willow Bend	0.300 U 0.300 U 3.309 0.300 U 0.300 U 0.300 U	N/A N/A 1.11 N/A N/A N/A
WH1477	Apartments and East Leg of Rocky Branch 1000 to 1250 ft, Row 2, North 1000 to 1250 ft, Row 2, South 1000 to 1250 ft, Row 2: East	0.300 U	N/A
WH1478		0.300 U	N/A
WH1479		0.300 U	N/A
WH1480	1250 to 1500 ft, Row 1: North	0.300 U	N/A
WH1481	1250 to 1500 ft, Row 1: South	0.300 U	N/A
WH1483	1250 to 1500 ft, Row 1: East	0.300 U	N/A
WH1492 WH1491 WH1490 WH1493 WH1494A WH1495B WH1496C WH14970	1500 to 1750 ft, Row 1: North 1500 to 1750 ft, Row 1: South 1500 to 1750 ft, Row 1: East (ORIG) 1500 to 1750 ft, Row 1: East (QDU of WH1490) 1500 to 1750 ft, Row 1: East (QDM of WH1490) 1500 to 1750 ft, Row 1: East (QDM of WH1490) 1500 to 1750 ft, Row 1: East (QDM of WH1490) 1500 to 1750 ft, Row 1: East (QDM of WH1490)	0.300 U 0.300 U 0.300 U 0.300 U 0.300 U 0.300 U 0.300 U	N/A N/A N/A N/A N/A N/A N/A
WH1499	1750 to 1880 ft, Row 1: North	0.300 U	N/A
WH2000	1750 to 1880 ft, Row 1: South	0.300 U	N/A
WH1498	1750 to 1880 ft, Row 1: East	0.300 U	N/A

Measurement of distances begins at the junction of the West and East Legs; see Fig. 4, 5 and 6.

U - Not detected at stated concentration N/A - Not applicable ORIG - Original sample of quality control pair QDU - Duplicate sample of quality control pair QDM - Composite mixture check

A separate 12 by 12 foot fine grid was established in the area including the mound of dirt (see Figure 7). Twenty-five grab soil samples were collected, each 3 feet apart within the grid; the sample aliquots were composited to generate one sample for analysis. As Figures 6 and 7 show, all the re-sample results were "not detected" at a level of 0.300 ppb TCDD.





(X,XX) - TCDD ND - NOT DETECTED



### 5.2.2 Area C: "Residential"

For the purposes of this report, the section of Area C where private residential property is located within the sampling area is defined as the "residential" area. The fine grid sampling strategy used for the residential property in this area was generally the same as that used for Area C "non-residential" (see Section 5.2.1), except that the grid unit dimensions were 20 feet by property line. Figure 8 diagramatically presents a typical sampling grid in the residential area adjacent to the west leg of Rocky Branch Creek. Adjacent to the east leg, samples were collected at points north, south and east of the reference point.

As in the "non-residential" area, two 20-foot wide grids (rows) were sampled initially. The three composite samples from Row 1 were analyzed first. If the semi-isomer specific TCDD level was 1 ppb or greater in any of the three samples, Row 2 composite samples were analyzed. In all cases, samples with TCDD concentrations of 1 ppb or greater were also analyzed for 2,3,7,8-TCDD. If results for Row 2 composite samples were 1 ppb or greater, two additional grids, further away from the creek were sampled and analyzed one row at a time until sample results indicated less than 1 ppb TCDD.

Included in the sampling plan for the "residential" area were areas adjacent to and including manholes. The grid sampling plan used for manhole areas differed slightly from the plan described above for residential property. The differences included: (1) the distance between the reference point markers which determined distances to aliquot collection locations; and (2) the overall dimensions of the grid. Both measurements were determined at the specific location and were dependent on site-specific needs. All other factors (e.g., number of composites collected) remained the same.

For greater detail in showing grid dimensions and sample aliquot collection locations, each private residential property and manhole sampled is presented in an individual figure. The following residential properties were sampled: 2111, 2113 and 2112 West Lane; 2203 and 2202 Braden Street; 618 and 620 Alta Cove; 601, 605, 609, 613, 617, 621, 625 and 629 Brookhaven Court; and 1703 and 1704 Hill Road. Figure 3 shows the location of each residential property relative to other locations in Area C.

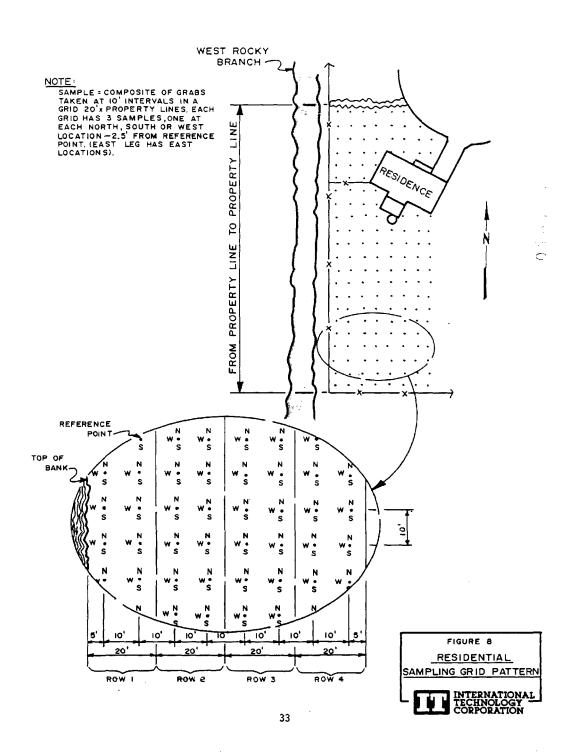


Table 6 and Figures 9 through 15 (pages 35 through 42) present analytical results for residential property located adjacent to the west leg of Rocky Branch Creek. Soil composite samples taken from the yards of three residential properties along the west leg (2203 Braden, 2202 Braden and 2112 West Lane) showed the presence of dioxin; the highest concentration detected was 4 ppb. The extent of contamination in each of these yards was determined by sampling and analyses until a section with less than 1 ppb dioxin was reached. All other properties adjacent to the west leg had soil with 2,3,7,8-TCDD concentrations less than 1 ppb.

Table 7 and Figures 16 through 24 (pages 43 through 52) present analytical results for residential properties adjacent to the east leg of Rocky Branch Creek with the exception of 1704 Hill Road. Soil samples from the properties along the east leg with the exception of 1704 Hill contained less than 0.300 ppb dioxin.

Descriptions of the sampling done at 1704 Hill Road and contiguous areas are presented on pages 53 through 58. A table and three figures present the analytical results and a diagrammatic representation of the grids and locations sampled at this location.

Descriptions of sampling and analytical results for additional manhole areas in Area C are presented on pages 58 through 61.

TABLE 6 AREA C: "RESIDENTIAL" AREA ALONG WEST LEG OF ROCKY BRANCH CREEK SUMMARY OF RESULTS OF DIOXIN ANALYSES OF SOIL SAMPLES

Sample Number	Location	TCDD (ppb)	2,3,7,8- TCDD (ppb)
WH2074	2111 West Lane, Row 1, North	0.300 U	N/A
WH2075	2111 West Lane, Row 1, South 2111 West Lane, Row 1, West	0.300 U	N/A
WH2073	2111 West Lane, Row 1, West	0.546	N/A
WH2067	2113 West Lane, Row 1, North	0.300 U	N/A
WH2068	2113 West Lane, Row 1, South	0.300 U	N/A
WH2065 WH2066	2113 West Lane, Row 1, South 2113 West Lane, Row 1, West (ORIG) 2113 West Lane, Row 1, West (QDU of WH2065)	0.300 U 0.300 U	N/A N/A
WH2080	2112 West Lane, Row 1, North	3.498	3.43
WH2081	2112 West Lane, Row 1, South 2112 West Lane, Row 1, West	4.313	4.18
WH2082		3.528	3.59
WH2085	2112 West Lane, Row 2, North	1.343 2.702	1.24
WH2083 WH2084	2112 West Lane, Row 2, North 2112 West Lane, Row 2, South 2112 West Lane, Row 2, West	1.637	2.74 1.51
WH2277	2112 West Lane, Row 3, North	0.539	N/A
WH2278 WH2282	2112 West Lane, Row 3, North 2112 West Lane, Row 3, South 2112 West Lane, Row 3, West	0.716 0.575	N/A N/A
WH2087	2203 Braden, Row 1. North	1,911	1.87
₩H2088	2203 Braden, Row 1, North 2203 Braden, Row 1, South 2203 Braden, Row 1, West	2.497	2.39
WH2086		2.329	2.27
WH2089	2203 Braden, Row 2, North	1.253	1.20
WH2091 WH2090	2203 Braden, Row 2, South 2203 Braden, Row 2, West	1.265 1.080	1.21 1.11
WH2287	2203 Braden, Row 3, North	0.300 U	N/A
WH2286 WH2289	2203 Braden, Row 3, South 2203 Braden, Row 3, West	1.621 0.300 U	0.33 N/A
WH2292	2203 Braden, Row 4, North	0.300 U	N/A
WH2291 WH2290	2203 Braden, Row 4, South 2203 Braden, Row 4, West	0.300 U 0.300 U	N/A N/A
WHZZYU	ZZUS Dragen, kow 4, west	0.300 0	M/A
WH2094	2202 Braden, Row 1, North	0.922	1.00
WH2096 WH2092	2202 Braden, Row 1, South 2202 Braden, Row 1, West (ORIG)	1.210 1.727	1.16 1.66
WH2093	2202 Braden, Row 1, West (QDU of WH2092)	1.443	1.41
WH2097 WH2099	2202 Braden, Row 2, North	0.896 0.710	N/A N/A
WH2098	2202 Braden, Row 2, South 2202 Braden, Row 2, West	0.906	N/A
WH2295	2202 Braden, Row 3, North	0.300 U	N/A
WH2293 WH2294	2202 Braden, Row 3, North 2202 Braden, Row 3, South 2202 Braden, Row 3, West	0.387 0.300 U	N/A N/A
m ICE 34	Leve Siducii, non S, nest	V.300 U	
WH2106 WH2107	618 Alta Cove, Row 1, North	0.838 1.206	N/A 0.78
WH2107	618 Alta Cove, Row 1, North 618 Alta Cove, Row 1, West (ORIG) 618 Alta Cove, Row 1, West (ORIG)	0.631	N/A
WH2104	618 Alta Cove, Row 1, West (QDU of WH2103)	0.629	N/A
WH2109	618 Alta Cove, Row 2, North	0.424	N/A
WH2110 WH2108	618 Alta Cove, Row 2, South 618 Alta Cove, Row 2, West	0.430 0.385	N/A N/A
m15 100	OTO ATES COVE, KOW 2, MEST	0.303	N/A
WH2111 WH2113	620 Alta Cove, Row 1, North 620 Alta Cove, Row 1, South 620 Alta Cove, Row 1, West	0.382 0.566	N/A N/A
WH2112	COO ATT O D T T T	0.482	N/A

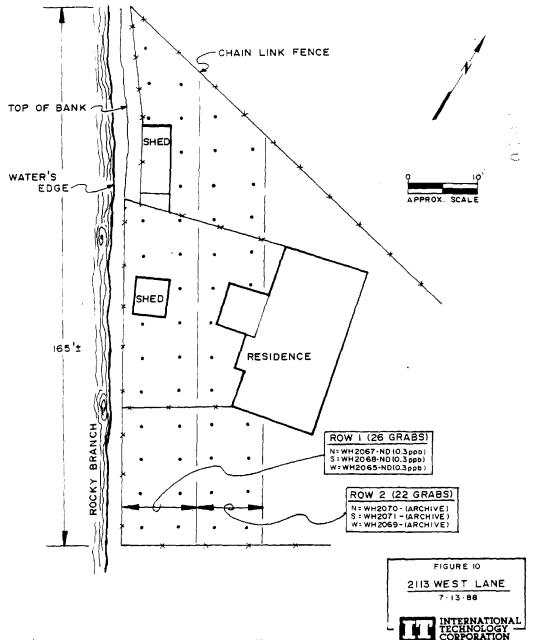
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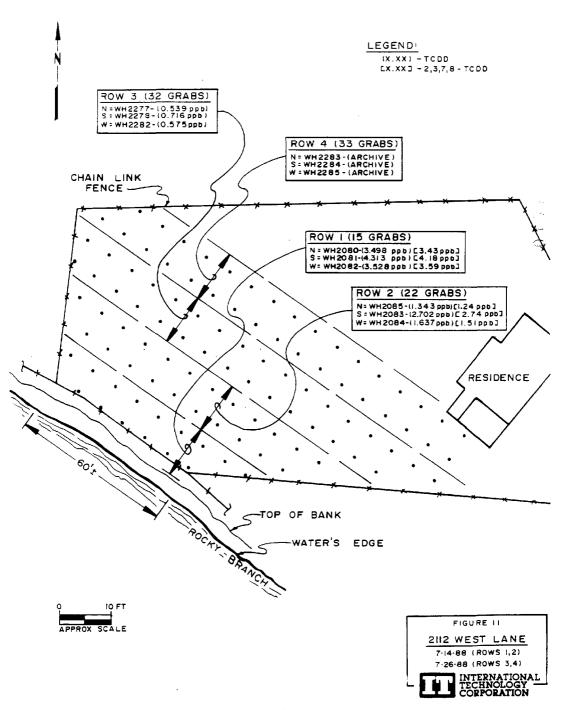
U - Not detected at stated concentration N/A - Not applicable ORIG - Original sample of quality control pair QDU - Duplicate sample of quality control pair

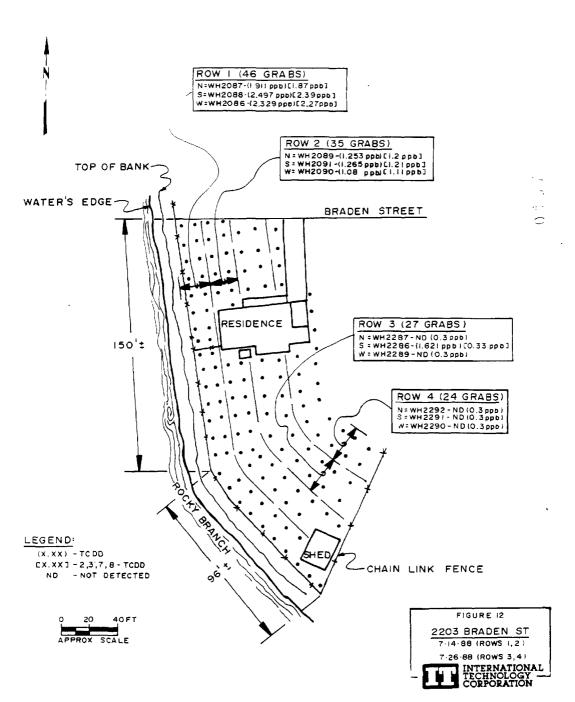
## LEGEND: (X.XX)-TCDD ND - NOT DETECTED CHAIN LINK FENCE-ROW 2 (14 GRABS) N= WH2078 - (ARCHIVE) S= WH2077 - (ARCHIVE) W= WH2076 - (ARCHIVE) RESIDENCE ROW | (II GRABS) N= WH2074 - ND (0.3 ppb) S = WH2075 - ND (0.3 ppb) W= WH2073 - (0.546 ppb) TOP OF BANK WATER'S EDGE . FIGURE 9 2111 WEST LANE 10 FT 7-13-88 PPROX. ^CALE 36

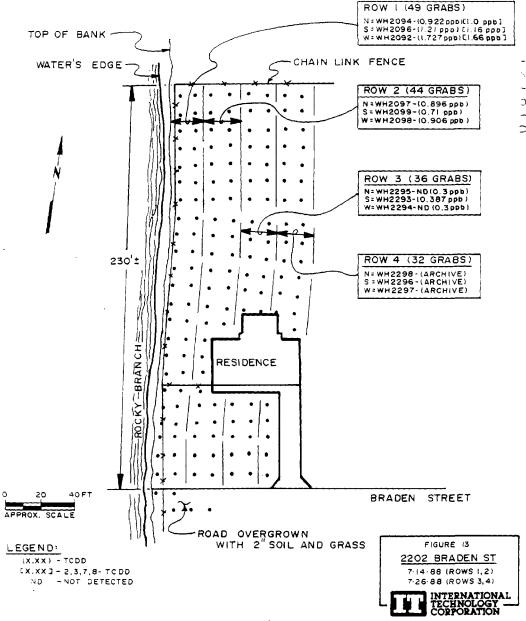
(X.XX) -- TC DD

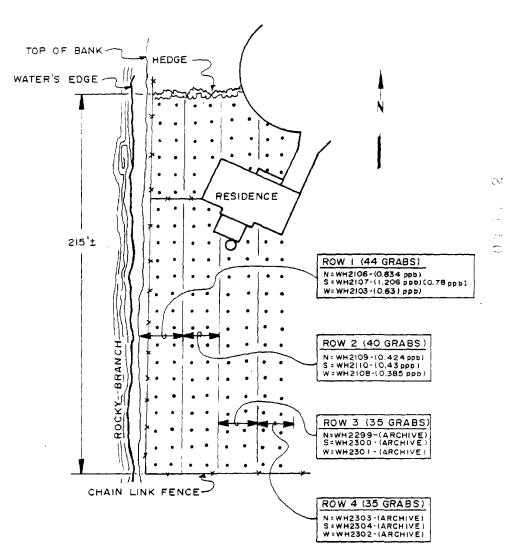
ND -- NOT DETECTED



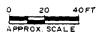


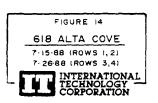






(X.XX) -TCDD [X.XX] -2,3,7,8 TCDD





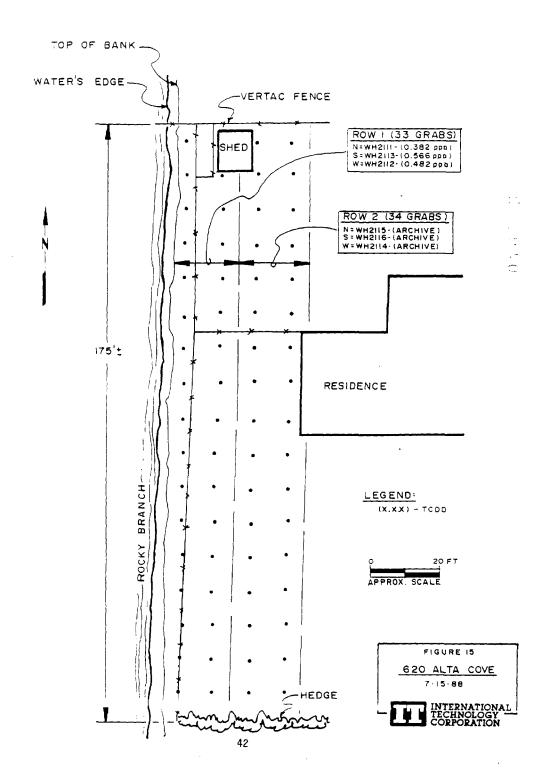
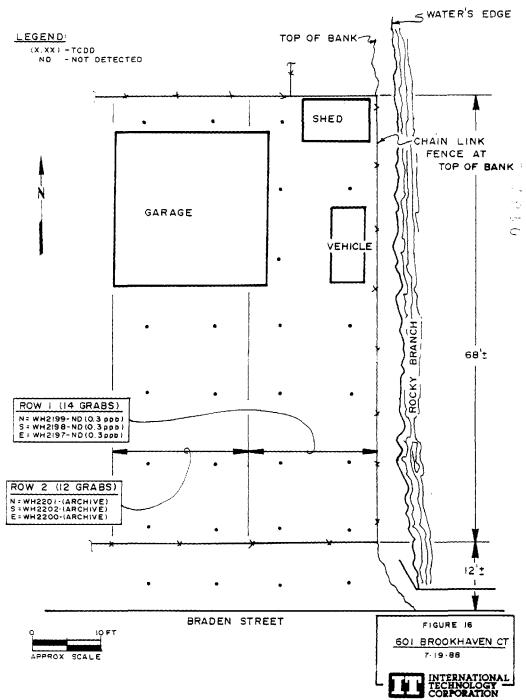
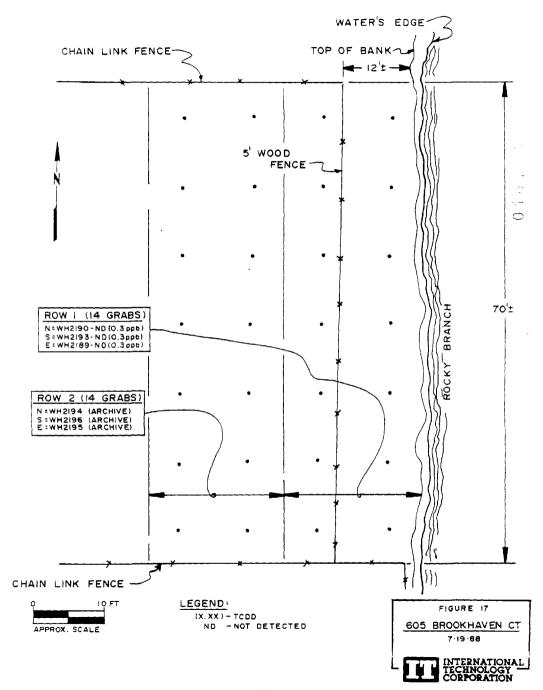


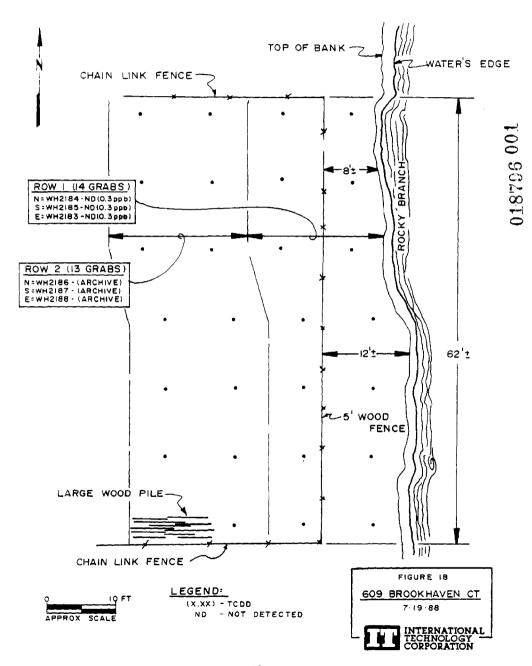
TABLE 7 AREA C: "RESIDENTIAL" AREA ALONG EAST LEG OF ROCKY BRANCH CREEK SUMMARY OF RESULTS OF DIOXIN ANALYSES OF SOIL SAMPLES

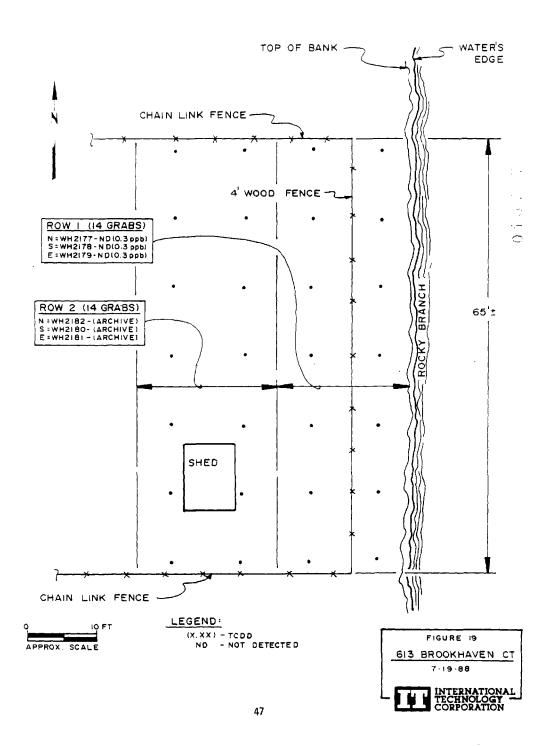
Sample Number	Location	TCDD (ppb)	2,3,7,8 TCDD (ppb)
WH2199	601 Brookhaven, Row 1, North	0.300 บ	N/A
WH2198	601 Brookhaven, Row 1, South	0.300 U	N/A
WH2197	601 Brookhaven, Row 1, East	0.300 U	N/A
WH2190	605 Brookhaven, Row 1, North (ORIG)	0.300 U	N/A
WH2191	605 Brookhaven, Row 1, North (QDU of WH2190)	0.300 U	N/A
WH2193	605 Brookhaven, Row 1, South	0.300 U	N/A
WH2189	605 Brookhaven, Row 1, East	0.300 U	N/A
WH2184	609 Brookhaven, Row 1, North	0.300 U	N/A
WH2185	609 Brookhaven, Row 1, South	0.300 U	N/A
WH2183	609 Brookhaven, Row 1, East	0.300 U	N/A
WH2177	613 Brookhaven, Row 1, North	0.300 U	N/A
WH2178	613 Brookhaven, Row 1, South	0.300 U	N/A
WH2179	613 Brookhaven, Row 1, East	0.300 U	N/A
WH2170	617 Brookhaven, Row 1, North	0.300 U	N/A
WH2173	617 Brookhaven, Row 1, South	0.300 U	N/A
WH2169	617 Brookhaven, Row 1, East	0.300 U	N/A
WH2162	621 Brookhaven, Row 1, North	0.300 U	N/A
WH2164	621 Brookhaven, Row 1, South	0.300 U	N/A
WH2163	621 Brookhaven, Row 1, East	0.300 U	N/A
WH2150	625 Brookhaven, Row 1, North	0.300 U	N/A
WH2149	625 Brookhaven, Row 1, South (ORIG)	0.300 U	N/A
WH2156	625 Brookhaven, Row 1, South (QDU of WH2149)	0.300 U	N/A
WH2157 WH2151	625 Brookhaven, Row 1, South (QDU of WH2156)	0.300 U 0.300 U	N/A N/A
WH2152A	625 Brookhaven, Row 1, East (ORIG) 625 Brookhaven, Row 1, East (QDM of WH2151)	0.300 U	N/A N/A
WH2153B	625 Brookhaven, Row 1, East (QDM of WH2151)	0.300 U	N/A
WH2154C	625 Brookhaven, Row 1, East (QDM of WH2151)	0.300 U	N/A
WH2155D	625 Brookhaven, Row 1, East (QDM of WH2151)	0.300 U	N/A
WH2158	625 Brookhaven, Row 1, East (QDU of WH2151)	0.300 U	N/A
WH2143	629 Brookhaven, Row 1, North	0.300 U	N/A
WH2146	629 Brookhaven, Row 1, South	0.300 U	N/A
WH2144	629 Brookhaven, Row 1, East	0.300 U	N/A
WH2138	1703 Hill, Row 1, North	0.300 U	N/A
WH2137	1703 Hill, Row 1, South	0.300 U	N/A
WH2139	1703 Hill, Row 1, East	0.300 U	N/A

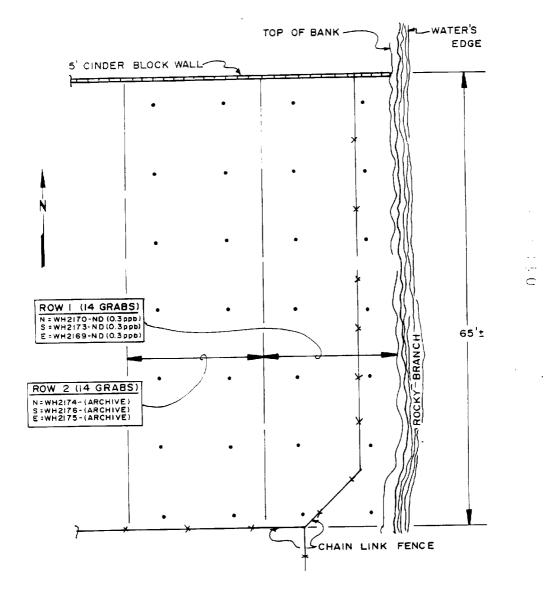
U - Not detected at stated concentration N/A - Not applicable ORIG - Original sample of quality control pair QDU - Duplicate sample of quality control pair QDM - Composite mixture check







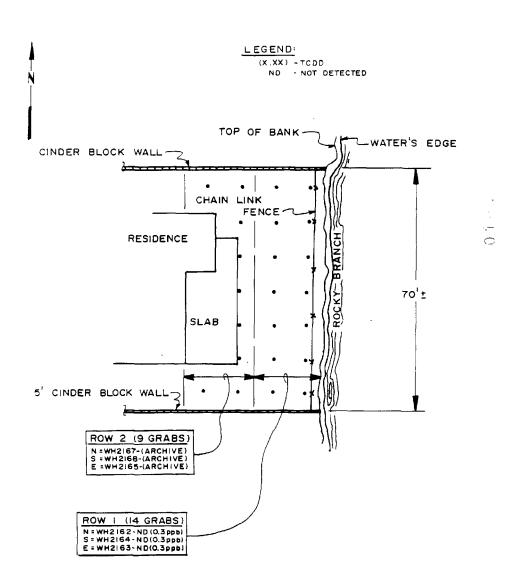






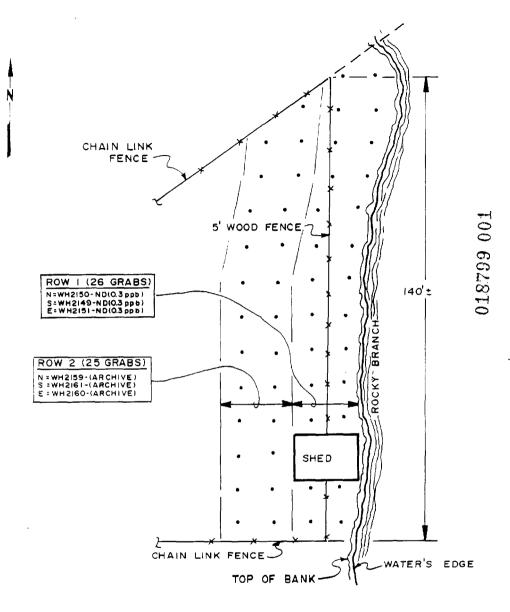
(X.XX) -TCDD ND - NOT DETECTED







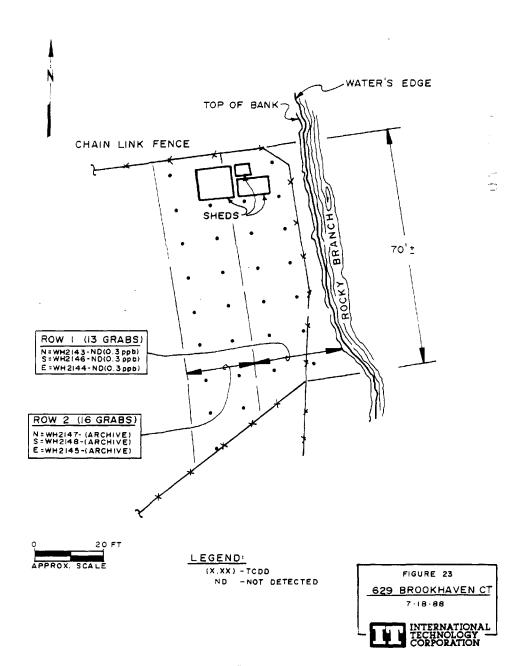


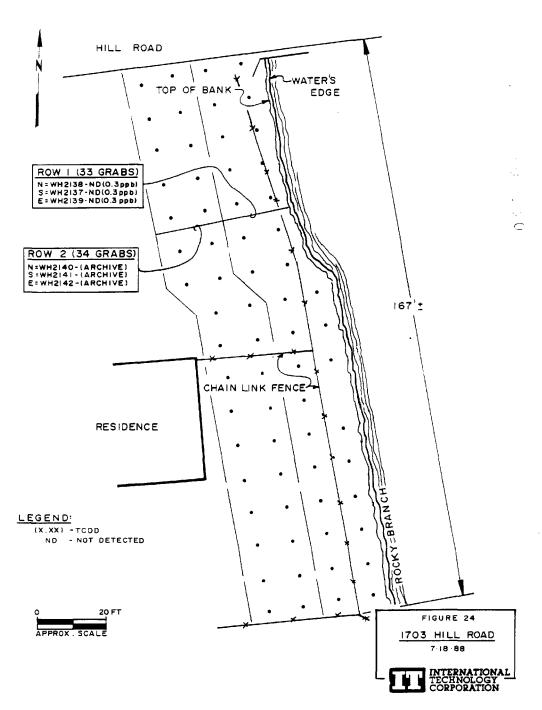




LEGEND: (X.XX) -TCDD ND - NOT DETECTED







The property at 1704 Hill Road was included in the sampling plan as one of the residences adjacent to the east leg of Rocky Branch Creek. Located at 1704 Hill Road is manhole number 2745 which was also included in the sampling plan. The initial sampling at this location was done at: (1) two 20-foot wide grids (rows) adjacent to the creek running the north-south length of the property; and (2) a grid, which included a ditch, eastward from the manhole to the western edge of Row 2. Analytical results from the original grid for the manhole and for Rows 1 and 2 resulted in further sampling on this property (Table 8 and Figure 25).

The second phase of sampling done was to establish and sample Rows 3 and 4 in the yard and to establish and sample grids north and south of the original grid at manhole 2745. Analytical results obtained from this second sampling phase (Table 8 and Figure 25) led to more sampling at 1704 Hill Road and contiguous locations to better delineate the extent and degree of contamination.

The sections originally sampled as Rows 1 and 2, divided into segments north and south of the ditch, and a grid encompassing only the eastern part of the ditch extending from manhole number 2745 to Rocky Branch were sampled (Table 8 and Figure 26).

After examination of the land west and north of 1704 Hill Road and discussions between the EPA RPM and Hercules Incorporated, the section of the ditch west of the manhole and a low area on the Vertac plant property immediately north of the western end of the ditch were sampled (Table 8 and Figure 25).

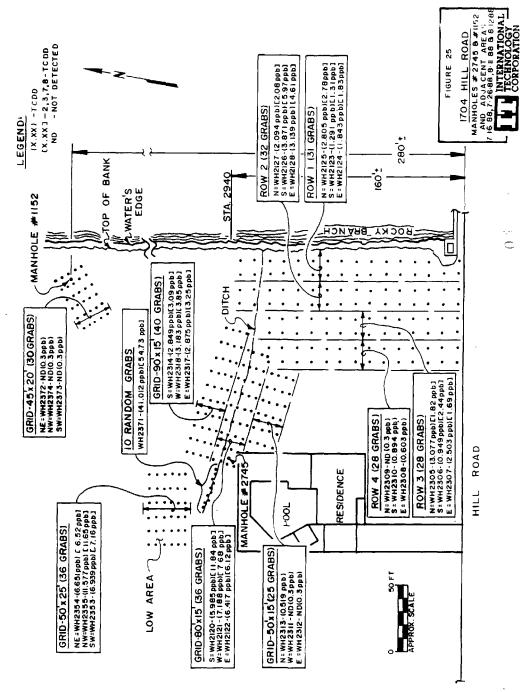
Areas around other manholes which are part of the same sewage collection (interceptor) line as manhole number 2745 were also sampled. These manholes are number 1152, north of 1704 Hill Road and near Rocky Branch Creek; number 2741, located at 1712 Hill Road; and number 2740, located at 1804 Hill Road. In addition, a ditch at the northern edge of the 1712 and 1804 Hill Road properties was also sampled (Table 8; Figures 25 and 27).

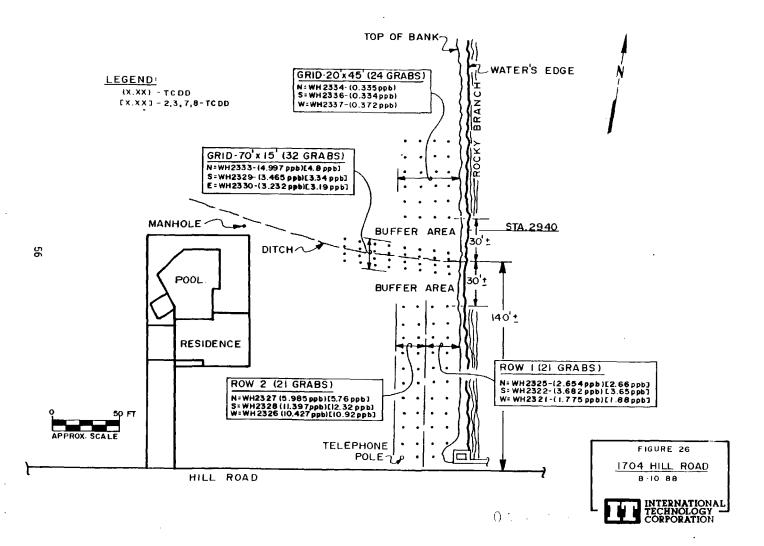
### AREA C: 1704 HILL ROAD and GRIDS AT MANHOLE NUMBERS 2745, 1152, 2741 and 2740 SUMMARY OF RESULTS OF DIOXIN ANALYSES OF SOIL SAMPLES

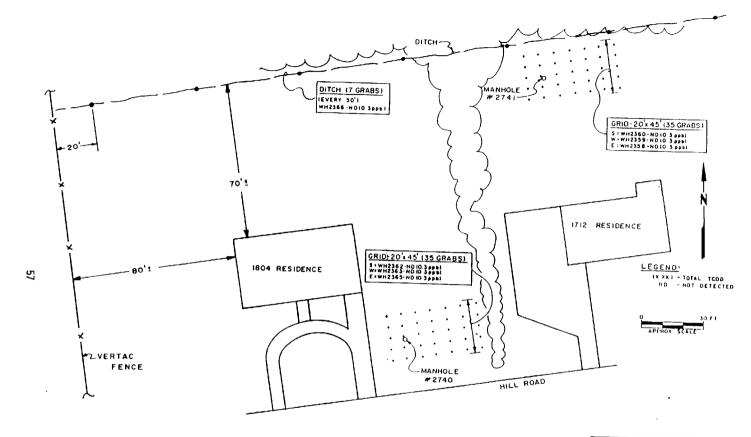
Sample Number	Location	TCDD (ppb)	2,3,7,8- TCDD (ppb)
WH2125	1704 Hill, Row 1, North*	2.805	2.78
WH2123	1704 Hill, Row 1, South*	1.291	1.31
WH2124	1704 Hill, Row 1, East*	1.843	1.83
WH2325	1704 Hill, Row 1, 30 ft south of ditch to Hill road, North** 1704 Hill, Row 1, 30 ft south of ditch to Hill road, South** 1704 Hill, Row 1, 30 ft south of ditch to Hill road, West (ORIG)** 1704 Hill, Row 1, 30 ft south of ditch to Hill road, West (QDU of WH2321)	2.654	2.66
WH2322		3.682	3.65
WH2321		1.775	1.88
WH2324		2.388	2.30
WH2127	1704 Hill, Row 2, North*	2.094	2.08
WH2126	1704 Hill, Row 2, South*	3.871	5.97
WH2128	1704 Hill, Row 2, East*	3.139	4.61
WH2327	1704 Hill, Row 2, 30 ft south of ditch to Hill road, North** 1704 Hill, Row 2, 30 ft south of ditch to Hill road, South** 1704 Hill, Row 2, 30 ft south of ditch to Hill road, West**	5.985	5.76
WH2328		11.397	12.32
WH2326		10.427	10.92
WH2334	North of ditch, adjacent to Rocky Branch, North**	0.335	N/A
WH2336	North of ditch, adjacent to Rocky Branch, South**	0.334	N/A (-
WH2337	North of ditch, adjacent to Rocky Branch, West**	0.372	N/A (-
WH2305	1704 Hill, Row 3, North* 1704 Hill, Row 3, South* 1704 Hill, Row 3, East*	3.077	1.82
WH2306		0.949	2.44
WH2307		2.503	1.69
WH2309	1704 Hill, Row 4, North*	0.300 U	N/A
WH2310	1704 Hill, Row 4, South*	0.894	N/A
WH2308	1704 Hill, Row 4, East*	0.603	N/A
WH2120	Manhole #2745, 1704 Hill, South"	5.985	11.84
WH2121	Manhole #2745, 1704 Hill, West*	7.188	7.68
WH2122	Manhole #2745, 1704 Hill, East*	6.417	6.12
WH2333	80 ft east of Manhole #2745 to Rocky Branch, North** 80 ft east of Manhole #2745 to Rocky Branch, South (ORIG)** 80 ft east of Manhole #2745 to Rocky Branch, South (QDU of WH2329) 80 ft east of Manhole #2745 to Rocky Branch, East**	4.997	4.80
WH2329		3.465	3.34
WH2332		2.863	2.78
WH2330		3.232	3.19
WH2371	Ditch west from Manhole #2745*	41.012	54.73
WH2314	Manhole #2745, north of ditch, South (ORIG)* Manhole #2745, north of ditch, South (QDU of WH2314) Manhole #2745, north of ditch, West* Manhole #2745, north of ditch, East*	2.849	3.09
WH2316		2.814	2.69
WH2318		3.183	3.85
WH2317		2.875	3.25
WH2313	Manhole #2745, 1704 Hill, south of ditch, North*	0.519	
WH2311	Manhole #2745, 1704 Hill, south of ditch, West*	0.300 U	
WH2312	Manhole #2745, 1704 Hill, south of ditch, East*	0.300 U	
WH2354	Low area north of 1704 Hill pool, Northeast <sup>*</sup>	6.651	6.52
WH2355	Low area north of 1704 Hill pool, Northwest (ORIG) <sup>*</sup>	11.577	11.65
WH2357	Low area north of 1704 Hill pool, Northwest (QDU of MH2355)	5.128	5.10
WH2353	Low area north of 1704 Hill pool, Southwest <sup>*</sup>	6.939	7.16
WH2372 WH2374 WH2373	Manhole #1152, Northeast* Manhole #1152, Northwest* Manhole #1152, Southwest*	0.300 U 0.300 U 0.300 U	N/A
WH2360	Manhole #2741, 1712 Hill, South***	0.300 U	N/A
WH2359	Manhole #2741, 1712 Hill, West***	0.300 U	
WH2358	Manhole #2741, 1712 Hill, East***	0.300 U	
WH2362	Manhole #2740, 1804 Hill, South***	0.300 U	N/A
WH2363	Manhole #2740, 1804 Hill, West***	0.300 U	
WH2365	Manhole #2740, 1804 Hill, East***	0.300 U	
₩H2366	Ditch in backyards of 1712 and 1804 Hill***	0.300 U	N/A

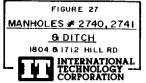
<sup>\* -</sup> See Figure 25
\*\* - See Figure 26
\*\*\* - See Figure 27

U - Not detected at stated concentration N/A - Not applicable ORIG - Original sample of quality control pair QDU - Duplicate sample of quality control pair









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The results obtained from these sequential sampling efforts indicate that contamination on the 1704 Hill Road property and adjacent areas was confined to portions of the yard and the area of the ditch at the northern edge of the property and the low area on Vertac plant property. The concentrations of dioxin in the yard ranged from less than 0.300 ppb to 12 ppb; the western portion of the ditch contained 54 ppb.

The results of sampling of areas at 1712 and 1804 Hill Road indicated less than 0.300 ppb levels of dioxin.

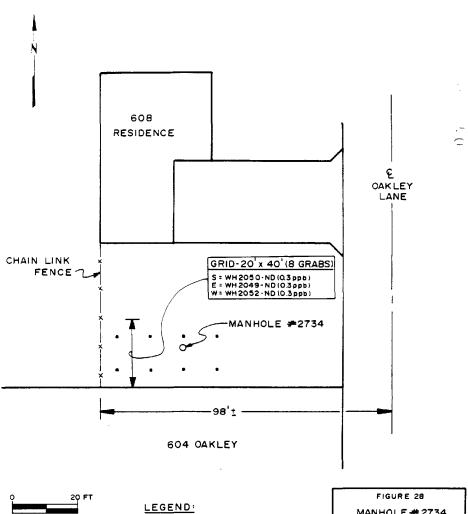
As required by the initial sampling plan, the manhole area surrounding manhole No. 2734 located in the side yard of 608 Oakley Lane (the address given in the plan, 612 Oakley, was shown to be incorrect by Jacksonville City Utility Maps) was sampled using a fine grid sampling strategy. In addition, manhole No. 2735 located in the backyard of 617 Oakley Lane was sampled using the fine grid strategy. This addition to the sampling plan was requested by the EPA RPM and agreed to by Hercules Incorporated. As shown in Table 9 and Figures 28 and 29, soil samples from the areas around the manholes contained less than 0.300 ppb ·TCDD.

TABLE 9

AREA C: GRIDS AT MANHOLE NUMBER 2734 and NUMBER 2735
SUMMARY OF RESULTS OF DIOXIN ANALYSES OF SOIL SAMPLES

Sample Number	Location	TCDD (ppb)	2,3,7,8- TCDD (ppb)
WH2050	Manhole Number 2734, 608 Oakley, South	0.300 U	N/A
WH2049	Manhole Number 2734, 608 Oakley, East	0.300 U	N/A
WH2052	Manhole Number 2734, 608 Oakley, West	0.300 U	N/A
WH2237	Manhole Number 2735, 617 Oakley, North	0.300 U	N/A
WH2238	Manhole Number 2735, 617 Oakley, South	0.300 U	N/A
WH2236	Manhole Number 2735, 617 Oakley, West	0.300 U	N/A

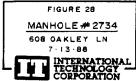
 $<sup>\</sup>mbox{\bf U}$  — Not detected at stated concentration  $\mbox{\bf N/A}$  — Not applicable

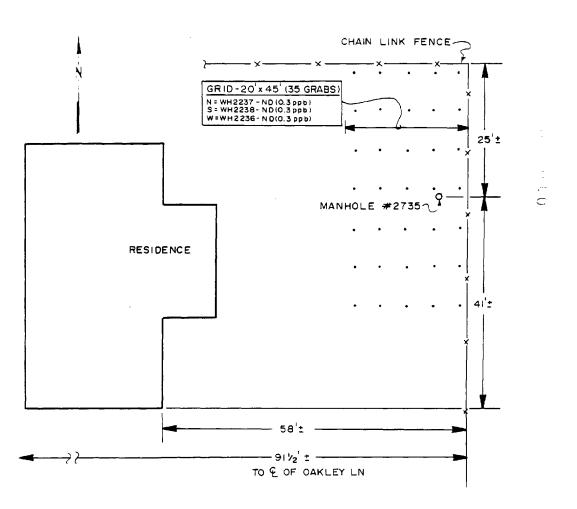


APPROX. SCALE

(X.XX) - TC DD ND - NOT DETECTED

60





# LEGEND: (X.XX) - TCDD ND - NOT DETECTED





# 5.2.3 Area D: Gross Grid, Random Grab Samples

The entire residential area between the east and west legs of Rocky Branch Creek was divided into two large grids - east and west. Three grab (not composite) soil samples were collected in each grid. The sample locations were selected by a representative of the property owners based on suspected contamination, and were approved by the EPA RPM. Table 10 and Figure 30 present the sample locations and analytical results.

The EPA RPM and Hercules Incorporated also approved the sampling of a garden at 2113 Braden after the IT-FAS field effort had been completed. Hercules Incorporated was responsible for collection of this sample on September 7, 1988, in the presence of the EPA RPM. The composite sample, WH2383, was composed of six aliquots collected with a stainless steel spoon. The aliquots were taken from the garden area in the backyard of the residence. The sample was composited according to the routine procedure and submitted for analysis. Table 10 and Figure 30 also present the result for this sample. All field information and data for Area D samples are located in Table A-2, Appendix A.

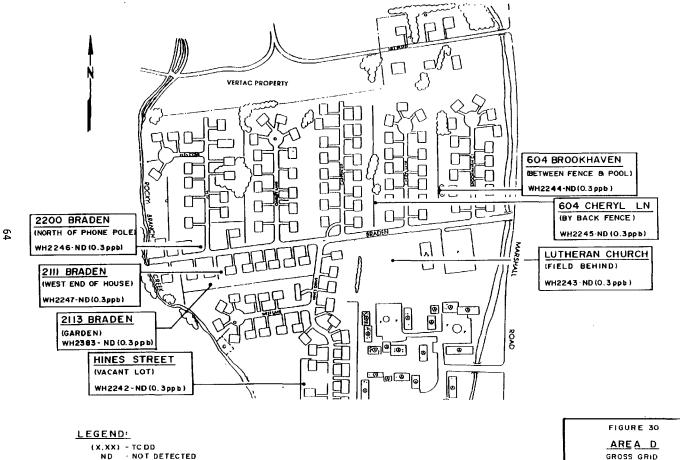
All samples from Area D contained less than 0.3 ppb TCDD.

TABLE 10

AREA D: "RESIDENTIAL" AREA GROSS GRID
SUMMARY OF RESULTS OF DIOXIN ANALYSES OF SOIL SAMPLES

Sample Number	Location	TCDD (ppb)	2,3,7,8- TCDD (ppb)	
WH2244	604 Brookhaven; between backyard fence and pool	0.300 U	N/A	
WH2245	604 Cheryl; by fence across backyard	0.300 U	N/A	
₩H2246	2200 Braden; 4 ft. north of telephone pole on corner	0.300 U	N/A	(`
WH2247	2111 Braden; on west side of house between plants and house	0.300 U	N/A	
WH2242	Vacant lot on Hines Street between 3010 and 3018 Hines	0.300 U	N/A	· · ·
WH2243	Field behind church on Braden Street	0.300 U	N/A	
WH2383	2113 Braden; in garden	0.300 U	N/A	

U - Not detected at stated concentration N/A - Not applicable



GROSS GRID

# 5.3 AREAS E1/E2, F, G1/G2 and G3: OLD SEWAGE TREATMENT PLANT (STP)

The original sampling plans separated locations within or adjacent to the Old Sewage Treatment Plant (STP; West Wastewater Treatment Plant) into four major sampling areas: (1) Area E1/E2, the sludge drying beds and clarifier area; (2) Area F, the Aeration Basin; (3) Area G1/G2, the Oxidation Ponds; and (4) Area G3, the walls and bottom of the outfall ditch (channel). With the approval of the EPA RPM, sampling was not done in the outfall ditch (channel). Instead, a section of the Bayou Meto at the outfall channel was sampled; the section of the Bayou Meto became sampling Area G3. For clarity, the analytical results for soil and sediment samples collected from all areas associated with the STP are presented in Table 11. A description of each area is presented in following sections of this report along with figures for each major area.

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# 5.3.1 Areas E1/E2: Sludge Drying Beds and Clarifier Area

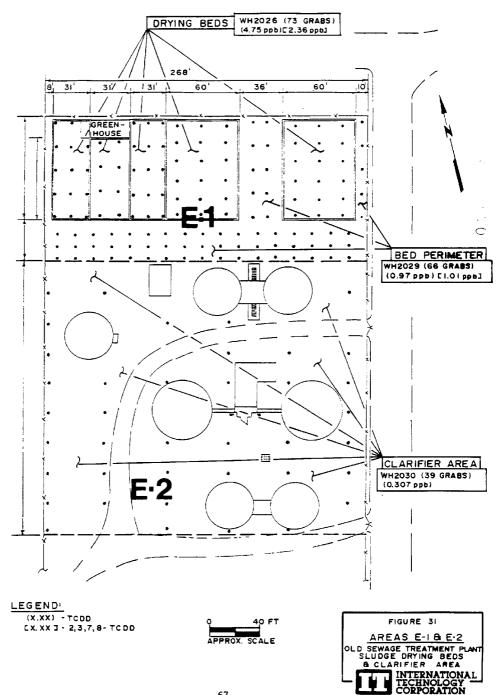
The area defined in the sampling plan as the "old sewage treatment plant" was divided into two major areas for sampling: E1, the sludge drying beds and E2, the clarifier area. The sludge drying bed area was sampled using two fine grids: one inside the sludge beds and one outside the sludge beds (i.e., the perimeter around the beds). One composite sample was collected from each grid unit as required by the sampling plan. The grid dimensions, the number of sample aliquots and their locations were determined on-site by the EPA RPM. The clarifier area was considered one grid unit. One composite sample composed of a total of 39 aliquots was collected for analysis. The EPA RPM selected the sample aliquot locations at the time of sampling.

Sample aliquot locations and analytical results for these two areas are shown in Figure 31. (Complete descriptions of the samples are presented in Table A-2, Appendix A). Duplicate samples from the sludge drying beds contained 2.4 and 2.8 ppb 2,3,7,8-TCDD; a composite soil sample from the perimeter of the beds contained 1 ppb 2,3,7,8-TCDD. Soil from the clarifier area contained less than 0.5 ppb.

Sample Number	Location	TCDD (ppb)	2,3,7,8 TCDD (ppb)
Ar	ea E: Sludge Drying Beds/Clarifier Area*		
WH2026 WH2027	Area El: Sludge Drying Beds, Soil (ORIG) Area El: Sludge Drying Beds, Soil (QDU of WH2026)	4.750 2.843	2.36 2.79
WH2029	Area El: Perimeter of Sludge Drying Beds, Soil	0.970	1.01
WH2030	Area E2: Clarifier Area, Soil	0.307	N/A
Ar	ea F; Aeration Basin**		
WH2135	Perimeter of Aeration Basin, Soil	0.300 U	N/A
WH2220 WH2227	North Quad, Top Sludge North Quad, Interface with Bottom	0.300 U 0.300 U	N/A N/A
WH2221 WH2228	Northeast Quad, Top Sludge Northeast Quad, Interface with Bottom	2.705 0.300 U	1.410 N/A
WH2224 WH2232	Southwest Quad, Top Sludge Southwest Quadrant, Interface with Bottom	0.710 0.300 U	N/A N/A
WH2222 WH2226 WH2229 WH2230	South Quad, Top Sludge (ORIG) South Quad, Top Sludge (QDU of MH2222) South Quad, Interface with Bottom (ORIG) South Quad, Interface with Bottom (QDU of WH2229)	2.840 2.336 0.300 U 0.300 U	2.83 1.07 N/A N/A
Ar	ea G: Oxidation Ponds (Lagoons)***		,
WH2134	Perimeter of Oxidation Ponds, Soil	0.300 U	N/A
	Area Gl: North Oxidation Pond		
WH2206 WH2207	West Half, Top Sludge West Half, Interface with Bottom	1.890 0.300 U	0.29 N/A
WH2208	East Half, Top Sludge	1.702	0.97
MH2209 MH2210	East Half, Interface with Bottom (ORIG) East Half, Interface with Bottom (QDU of WH2209)	0.300 U 0.300 U	N/A N/A
	Area G2: South Oxidation Pond		
WH2213 WH2212	West Half, Top Sludge West Half, Interface with Bottom	0.300 U 0.300 U	N/A N/A
WH2215 WH2214	East Half, Top Sludge East Half, Interface with Bottom	0.300 U 0.300 U	N/A N/A
	Area G3: Bayou Meto at Outfall of South Oxidation Pond		
WH2340 WH2341	Delta at Outfall, Sediment (ORIG) Delta at Outfall, Sediment (QDU of WH2340)	0.300 U 0.300 U	N/A N/A
WH2345	Bayou Meto, right bank, 6 inches#, Soil (ORIG)	0.300 U	N/A
WH2347 WH2344	Bayou Meto, right bank, 6 inches#, Soil (QDU of WH2345) Bayou Meto, right bank, 36 inches#. Soil	0.300 U 0.300 U	N/A N/A
H2343	Bayou Meto, right bank, 6 inches#, Soil (ORIG) Bayou Meto, right bank, 6 inches#, Soil (QDU of WH2345) Bayou Meto, right bank, 36 inches#, Soil Bayou Meto, right bank, 60 inches#, Soil	0.300 U 0.300 U	N/A
MH2352	Bayou Meto, left bank, 6 inches#, Soil Bayou Meto, left bank, 36 inches#, Soil (ORIG) Bayou Meto, left bank, 36 inches#, Soil (QDU of WH2349)	0.300 U	N/A
WH2349 WH2351	Bayou Meto, left bank, 36 inches#, Soil (ORIG) Bayou Meto, left bank, 36 inches# Soil (ODD) of WH2340)	0.300 U 0.300 U	N/A N/A
H2348	Bayou Meto, left bank, 60 inches#, Soil	0.300 U	N/A

<sup>\* -</sup> See Figure 31
\*\* - See Figure 32
\*\*\* - See Figure 33

<sup>@ -</sup> Non-2,3,7,8 isomers present
# - Distance from edge of water
U - Not detected at stated concentration
N/A - Not applicable
ORIG - Original sample of quality control pair
60



#### 5.3.2 Area F: Aeration Basin

One soil composite sample was collected around the perimeter of the aeration basin. The aliquots (grabs) for the composite were collected every 20 feet on the dike surrounding the basin, five feet from the edge of the water (see Figure 32).

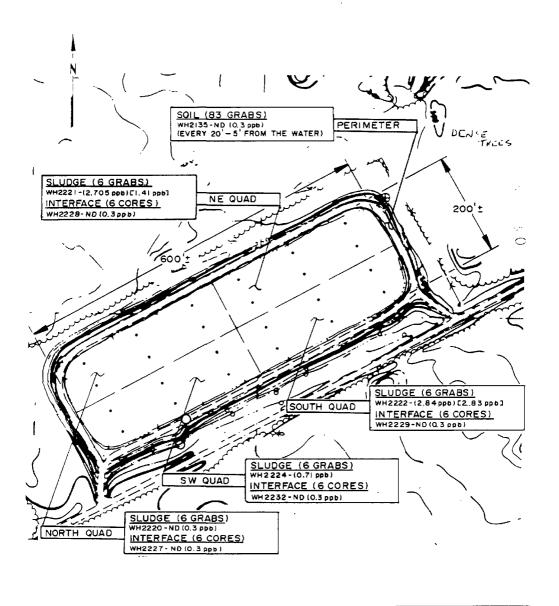
The sediment samples from within the basin were collected in a manner deviating slightly from the sampling plan. The deviation was documented and approved by the EPA RPM in a correspondence from the RPM to Hercules Incorporated. The deviation was that the basin was divided into four equal quadrants instead of three sections. Two composite samples were collected in each quadrant, one from the top sediment (or sludge) and one from the interface between the bottom sediment and clay bottom of the basin. Each composite sample was composed of six aliquots. The procedures used to collect the aliquots are described in Sections 3.2.1 and 3.2.2. The aliquot collection locations were determined by the EPA RPM and are presented along with the analytical results in Figure 32 and Table 11 (also see Table A-2. Appendix A).

All samples taken from the aeration basin contained less than 0.300 ppb TCDD except the top sludge samples of the northeast, southwest and south quadrants. The maximum concentration of 2,3,7,8-TCDD found was 2.8 ppb.

#### 5.3.3 Areas G1/G2: Oxidation Ponds

The north oxidation pond was identified as area G1, the south oxidation pond as area G2. One soil composite sample was collected around the perimeter of both ponds not including the dike separating the two. An aliquot was collected every 100 feet at a location five feet from the water's edge. This was a slight deviation from the plan and was approved by the EPA RPM and documented in the field logbook.

For sediment sampling, each pond was divided into two equal grids - east and west. Two composite samples, consisting of four aliquots each, were collected in each grid: the top sediment or sludge and the bottom sediment/clay interface. Sample collection procedures are described in Sections 3.2.1 and 3.2.2. The aliquot collection locations were determined on site by the EPA RPM. See Figure 33 and Table 11 for sample locations and analytical results (also see





LEGEND:

(X.XX) - TCDD

[X.XX] - 2,3,7,8 - TCDD

ND - NOT DETECTED



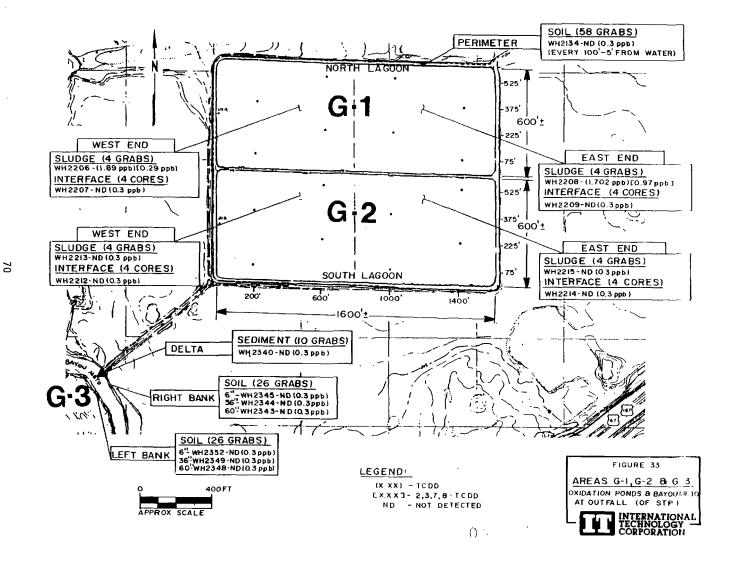


Table A-2, Appendix A). All samples from the oxidation ponds contained less than 1 ppb 2,3,7,8-TCDD.

#### 5.3.4 Area G3: Bayou Meto at the STP Outfall

As mentioned above, deviation from the sampling plan concerning the STP outfall area was approved by the EPA RPM due to conditions on-site. Instead of sampling the outfall channel bank and bottom, the delta created in the Bayou Meto by the outfall effluent was sampled, and the right and left banks of the Bayou Meto at its confluence with the outfall channel were sampled.

Ten points in the delta area were selected at random and equal aliquots of sediment were collected using stainless steel spoons. The sampling area was wet, but not under water. The ten aliquots were composited for analysis.

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Starting at the upstream edge of the delta (the same as the downstream corner of the confluence with the outfall) and extending 250 feet downstream, the right and left banks of the Bayou Meto were sampled. Three composite soil samples were collected on each bank: 6 inches, 36 inches and 60 inches distance from the edge of the water. The sample aliquots were ten feet apart for a total of 26 aliquots for each composite sample. The sample results are presented in Table 11 and Figure 33 (see also Table A-2, Appendix A). All samples collected from Area G3 contained less than 0.300 ppb TCDD.

# 5.4 AREA H: MANHOLE NO. 2043

The low area containing manhole number 2043 located between South Redmond Road and the Missouri Pacific Railroad line just west of Rocky Branch was sampled using a modification of the fine grid procedure (see Figure 34). The 75-foot long grid contained six lines of sample aliquots collected every 15 feet for a total of 36 aliquots composited for one soil sample. The grid pattern was determined based on the contours of the land and was approved by the EPA RPM. Table 12 and Figure 34 present the analytical result showing less than 0.300 ppb dioxin.

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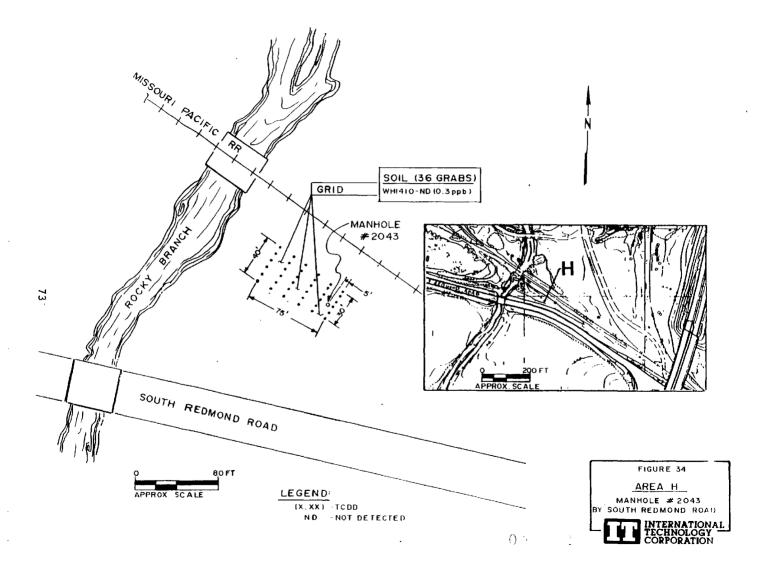


TABLE 12

# AREA H: AREA AT MANHOLE NUMBER 2043 SUMMARY RESULT OF DIOXIN ANALYSIS OF SOIL SAMPLE

Sample Number	Location	TCDD (ppb)	2,3,7,8- TCDD (ppb)
WH1410	Manhole Number 2043 near South Redmond Road	0.300 U	N/A

 $\subset$ 

 $\mbox{\bf U}$  — Not detected at stated concentration  $\mbox{\bf N/A}$  — Not applicable

#### 5.5 AREA I: LAKE DUPREE

Soil sample aliquots were collected every 75 feet around the perimeter of the lake, two feet from the water's edge, for a total of 38 aliquots composited for analysis. For sediment sample collection, the lake was divided into four equal quadrants. One sediment composite sample containing six aliquots, was collected from each section. As required by the plan, only the top sediment was sampled; procedures used are described in Section 3.2.1. The aliquot locations were selected by the EPA RPM prior to sampling. See Table 13 and Figure 35 for sample locations and analytical results. All samples collected from Lake Dupree contained less than 0.300 ppb dioxin.

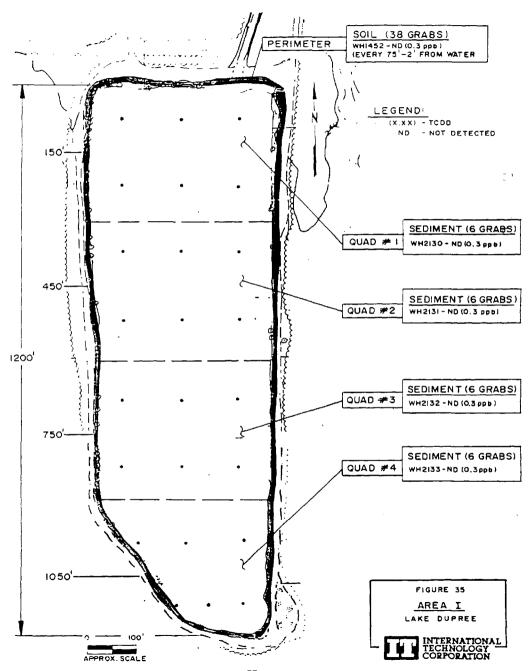
 $\bigcirc$ 

TABLE 13

AREA I: LAKE DUPREE
SUMMARY OF RESULTS OF DIOXIN ANALYSES OF SOIL AND SEDIMENT SAMPLES

Sample Number	Location	TCDD (ppb)	2,3,7,8- TCDD (ppb)
WH1452	Perimeter, Soil	0.300 U	N/A
WH2130	Quadrant #1, Sediment	0,300 U	N/A
WH2131	Quadrant #2, Sediment	0.300 U	N/A
WH2132	Ouadrant #3. Sediment	0.300 U	N/A
WH2133	Quadrant #4, Sediment	0.300 U	N/A

 $\mbox{\bf U}$  — Not detected at stated concentration N/A — Not applicable



#### 5.6 AREAS J. K. AND L: BAYOU METO BANKS

Only soil samples were collected along the banks of Bayou Meto. One 500-foot section was marked for composite samples on both the right and left banks (right and left determined facing upstream) at the locations marked J, K and L on the map in Figure 36. At K and L, the center of the bridges were considered the center of the 500-foot section. At Location J, a permanent marker fixed to a tree at the confluence of Bayou Meto and a tributary (see figure) was used as the center of the 500-foot section. Soil aliquots were collected every ten feet along the bank of each section for a total of 50 aliquots per composite sample. Aliquots were collected under the bridges at K and L and included in the composite. As a deviation from the plan, due to the contours of the banks, soil samples were collected at 6". 36", and 60" linear distance from the water's edge rather than 6". 12" and 36" elevation above the water level. This deviation was documented and approved by the EPA RPM in correspondence to Hercules Incorporated. As a permanent reference, the current water level was determined by measuring the distance from the railroad bridge at Location K down to the surface of the water. This measurement was documented in the field logbook.

The 6" composite samples were analyzed first; the composites for the 36" and 60" distances were archived. If the results for the 6-inch composite samples had been equal to or greater than 1 ppb TCDD, then the sample from the next distance would have been analyzed. However, in this case all the 6-inch composite samples contained less than 0.300 ppb TCDD; therefore, the other samples remained in archive (storage) status. On the left bank of Bayou Meto at Location J, the sampling team encountered obstacles from recent logging that severely hindered sampling at 36" and 60" from the water's edge. With the approval of the EPA RPM samples at these distances were not collected, and based on the results they were not needed. Table 14 and Figure 36 present the analytical results for this area.

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TABLE 14

AREAS J. K. and L: BANKS OF BAYOU METO
SUMMARY OF RESULTS OF DIOXIN ANALYSES OF SOIL SAMPLES

Sample Number	Location	TCDB (ppb)	2,3,7,8- TCDD (ppb)
	AREA J		
WH1401	Left Bank facing upstream, 6 inches from edge of water	0.300 U	N/A
WH1398	Right Bank facing upstream, 6 inches from edge of water	0.300 U	N/A
	AREA K: BAYOU METO AT MPRR bridge		
WH1393	Left Bank facing upstream, 6 inches from edge of water	0.300 U	N/A
WH1392	Right Bank facing upstream, 6 inches from edge of water	0.300 U	N/A
	AREA L: BAYOU METO AT HIGHWAY 161 BRIDGE		
WH1405	Left Bank facing upstream, 6 inches from edge of water	0.300 U	N/A
WH1404	Right Bank facing upstream, 6 inches from edge of water	0.300 U	N/A

 $\mbox{\bf U}$  — Not detected at stated concentration  $\mbox{\bf N/A}$  — Not applicable

#### 5.7 AREAS M AND N: DRY CREEK BEDS

Based on conditions found at the location designated as "M" in the sampling plan, the actual sampling strategy deviated from that described in the plan. The deviations were documented and approved by the EPA RPM. The dry drainage ditch (or creek bed) at Area M was sampled using a linear grid strategy. One soil aliquot was collected every ten feet at the mid-point of the creek bed for a distance of 500 feet for one composite sample of 50 portions.

A second dry ditch that drained into Rocky Branch Creek just south of the location of the old STP pipeline (which was never located) was designated Area N. One composite soil sample was collected from this ditch. Aliquots were collected from the middle of the bottom of the ditch at 10-foot intervals starting from Rocky Branch Creek and extending approximately 250 feet for a total of 25 sample portions. Table 15 presents the analytical results. Figure 37 also shows the location of the two dry "creek beds" and the analytical results of the two composite samples collected. The soil samples from the two dry creek beds contained less than 1 ppb TCDD.

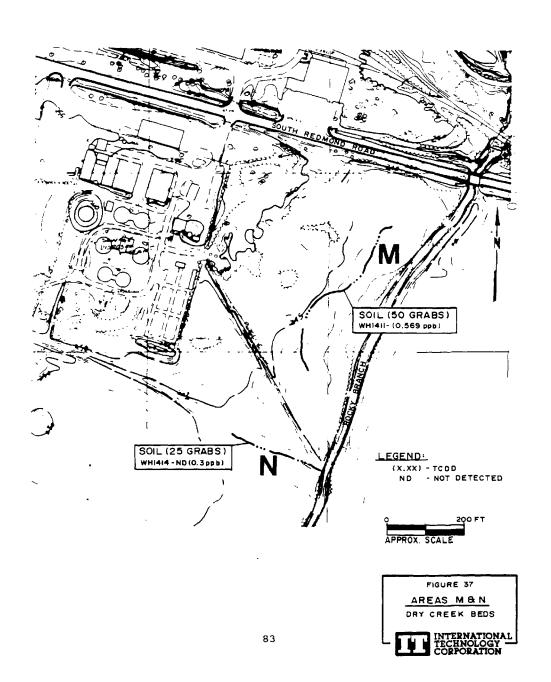
 $\subset$ 

TABLE 15

AREAS M and N: DRY CREEK BEDS
SUMMARY OF RESULTS OF DIOXIN ANALYSES OF SOIL SAMPLES

Sample Number	Location	TCDD (ppb)	2,3,7,8- TCDD (ppb)
	Area M:		
WH1411 WH1412	Dry Creek Bed M (ORIG) Dry Creek Bed M (QDU of WH1411)	0.569 0.489	N/A N/A
	Area N:		
WH1414	Dry Creek Bed N	0.300 U	N/A

U  $\sim$  Not detected at stated concentration N/A  $\sim$  Not applicable



# 5.8 AREA O: MOUND AT WEST MAIN STREET AND ROCKY BRANCH CREEK

At the request of the EPA RPM and approval of Hercules Incorporated, Area 0 was added to the sampling plan. The mound of soil located on the east bank of Rocky Branch just north of the West Main Street bridge was sampled using a modified fine grid strategy. One soil composite sample composed of 36 aliquots was collected for analysis. Table 16 presents the sample location description and analytical results. Figure 38 shows the grid pattern used (each point represents one aliquot collected) and the analytical results. The composite soil sample from this location contained less than 0.300 ppb TCDD.

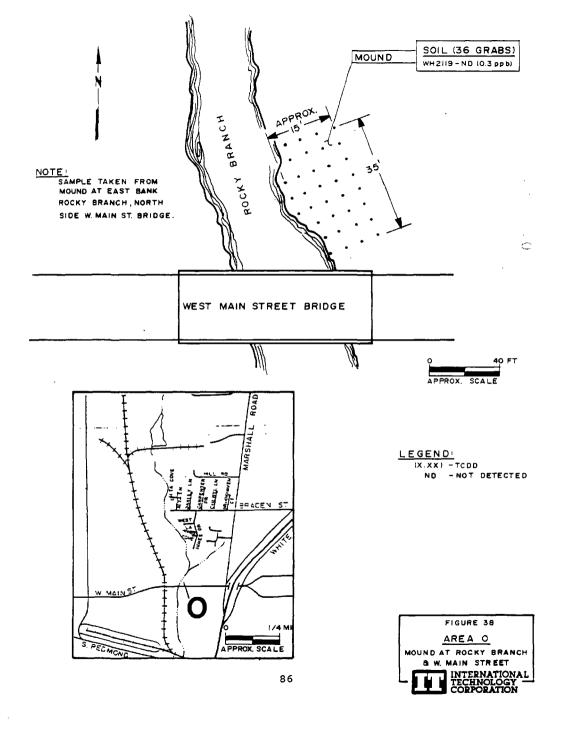
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TABLE 16

AREA 0: MOUND AT ROCKY BRANCH CREEK AND WEST MAIN STREET BRIDGE SUMMARY RESULT OF DIOXIN ANALYSIS OF SOIL SAMPLE

Sample Number	Location	TCDD (ppb)	2,3,7,8- TCDD (ppb)
WH2119	East bank of Rocky Branch at West Main Street Bridge	0.300 U	N/A

 $\mbox{\bf U}$  — Not detected at stated concentration  $\mbox{\bf N/A}$  — Not applicable



#### 6.0 FIELD DECONTAMINATION OF SAMPLING EQUIPMENT

All of the equipment used for sampling was decontaminated prior to initial use and between samples to prevent cross-contamination. The procedure involved rinsing gross soil or sediment from the sampling tool with tap water, then washing the tool with laboratory grade detergent ("Liquinox"), followed by rinses with fresh potable water, distilled water, acetone, hexane and a final distilled water rinse. Clean sampling tools were wrapped in aluminum foil during transport from one sample location to another.

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#### 7.0 SAMPLE HANDLING AND DOCUMENTATION

Collection of all field samples involved common sample documentation, handling and custody practices. These practices are necessary to ensure the integrity of the sample from collection to data reporting. The field sample custody procedures used for this program conform to the guidelines established in EPA's Test Methods for Evaluating Solid Wastes (SW-846).

# 7.1 FIELD DOCUMENTATION AND PHOTOGRAPHS

All pertinent field survey and sampling information was recorded in a logbook during each day of the field effort. The logbooks used were dedicated to this field effort. The Field Sampling Coordinator was responsible for ensuring that sufficient detail was recorded such that field activities could be reconstructed without relying on the memory of the field crew. An entry in a logbook included:

- Date and time that work was begun.
- 2) Names of field task leader and team members.
- 3) Description of work area.
- 4) Location of work area, including map reference letter.
- Details of work effort, including sampling procedures used, sample types, numbers, and locations for samples collected.
- 6) Field observations.
- 7) Equipment decontamination procedures.
- Weather conditions.

Strict custody procedures were maintained with the field logbooks. While being used in the field, logbooks were kept with the field team at all times. After completion of the field effort the logbooks were submitted to the IT-FAS project files in Knoxville, Tennessee.

In addition, an individual field collection log form was completed as each sample was collected (see Attachment 5, Figure 1 for an example). This form contained, at a minimum, the following information:

- Sample Number
- 2) Sample location description
- 3) Sample matrix type
- 4) Sample date and time
- 5) Depth sampled

- 6) Composite information
- Pertinent observations/descriptions
- Type of analysis requested and status (analyze/archive)
- 9) Initials of sampling personnel

Upon completion of the field effort the information on the individual field collection logs was entered into a computer database for data management and reporting. The original collection sheets have been placed in individual protective covers and are maintained in the IT-FAS project files.

For each sample collected one or more photographs was taken with a 35mm databack camera. The photographs showed the sample location including the best available reference points.

### 7.2 SAMPLE PACKAGING AND LABELING

Upon collection all samples were transferred into glass sample jars or bottles and capped with teflon-lined lids. With EPA approval, I-Chem Series 200 (or better) sample containers were used. Each sample container was labeled with a unique sample number (using serialized number tape on the lid and handwritten on the I-Chem label in indelible ink), the date collected, the analysis requested, the analytical method to be used, the preservative (if any) and the site location. An exception to this practice was taken for samples requiring multiple analyses (i.e., priority pollutant compounds); the same number was placed, using an indelible ink marker, on the separate containers for each of these samples. To prevent tampering with the sealed and labeled samples, custody tape was placed over the bottle cap, covering the sample number on the lid and the label on the bottle. For shipment to the laboratory, each sample container was placed in a heavy duty zip-lock bag, then into a sample can surrounded by an absorbent Each sample can was closed and a custody tape seal attached across the top. The sample cans were placed in coolers for overnight delivery to the designated laboratory. Additional absorbent or packing material was used to fill the voids in the cooler.

#### 7.3 CHAIN-OF-CUSTODY

A required part of any sampling and analytical program is to protect the integrity of, and keep track of, samples from collection to data reporting. This includes the ability to trace the possession and handling of samples from the time of collection, through analysis and final disposition. This documentation is referred to as "chain-of-custody".

Numerous sample identification documents were used to maintain identification and chain-of-custody of all samples collected and to control sample disposition. These include: sample number tape, sample labels, custody seals, chain-of-custody records, request for analysis forms and other laboratory specific forms. All labels were filled out with waterproof ink.

ITAS supplied the pre-numbered (in duplicate) tape used for sample identification, (with EPA approval). One label tape number was attached to each sample collected, and the second copy of the same number was affixed to the individual collection log sheet. Unused label numbers were returned to the Field Sampling Coordinator. For a sample requiring multiple analyses, the label tape number was attached to the sample container collected for TCDD analysis and the same sample number was handwritten in indelible ink on the sample labels of all other containers for that sample.

Sample cans containing samples for shipment to TMS Analytical Services, Inc. were placed in coolers sealed with custody seals. Two seals were placed on each cooler, one at the front and one at the back. Clear tape was placed over the seals to ensure that they were not accidentally broken during shipment. All samples were shipped under requirements listed in 49 CFR 172.101. Any additional requirements (i.e., labels) by the delivery service were determined prior to the commencement of sampling.

Those samples designated for archive status were maintained on-site throughout the duration of the field effort. Custody tape was placed over the sample container as described above and the container placed in a ziplock bag and kept with other archived samples in a locked trunk. The trunk was stored in a secured private warehouse. The keys to the trunk were in the custody of the IT-FAS Project Manager and the Field Sampling Coordinator only. Upon completion of the field effort all archived samples, under the custody of the IT-FAS Project Manager and Field Sampling Coordinator, were transferred to secured storage in Knoxville, Tennessee.

All samples being shipped to the laboratory for analysis were accompanied by a Chain-of-Custody Record (see Attachment 5, Figure 2). When transferring

samples, the individuals relinquishing and receiving would sign, date, and note the time on the record. This record was used to document sample custody transfer from the sampler to another field team member, to the shipper, then to the designated laboratory.

The samples were also accompanied by a Request-for-Analysis Record (see Attachment 5, Figure 3). This record listed the required analytical test(s) to be performed on each sample, as well as other sample information pertinent to analysis (such as sample volume, type, preservative used, possible hazards, turn around time requested, and disposal instructions).

The originals of the Chain-of-Custody and Request-for-Analysis records identifying the contents of the sample shipment were sealed in a zip-lock bag and placed in the lid of the corresponding sample cooler for delivery to the designated laboratory. The yellow copy of each record was maintained by the Field Sampling Coordinator on site until the end of the field effort, at which time these copies were transferred to the IT-FAS project files.

For those samples requiring multiple analyses, two Chain-of-Custody and Request for Analysis records were initiated. The originals were shipped in separate shipments along with the corresponding sample containers to the appropriate laboratory for analysis.

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#### 8.0 ANALYTICAL PROGRAM\*

After proper documentation and packaging procedures were completed, samples for dioxin analysis were shipped via an overnight carrier (e.g., Federal Express) to TMS Analytical Services, Inc., Indianapolis, Indiana. The following day, the on-site IT-FAS Project Manager verified by telephone that the samples had been received in good condition.

All the samples submitted were analyzed for TCDD on a 48-hour turnaround basis. Analysis for TCDD was performed using semi-isomer specific high resolution gas chromatography/tandem mass spectrometry (GC/MS/MS) as described in "Rapid Determination of TCDD in Soil and Sediment Using Gas Chromatography and Tandem Mass Spectrometry", USEPA, Region VII, March 1986 (Attachment 2). The detection limit for TCDD was less than 0.300 ppb. Results of 0.300 ppb or less are reported with the qualifier "U" (i.e., not detected).

For any sample with results for TCDD of 1 ppb or greater, confirmation analysis for 2,3,7,8-TCDD was performed using high resolution gas chromatography/low resolution mass spectrometry. If the extract prepared for the initial analysis for TCDD was used for the isomer-specific analysis, the procedures described in USEPA Contract Laboratory Program Statement of Work (SOW) for Rapid Turnaround Dioxin Analysis Multi-Media, November 1986, page III-67 (Attachment 3) were used. If it was necessary to prepare a new extract for the isomer-specific analysis, procedures for sample preparation as described in Attachment 3, page III-32 and analysis by high resolution gas chromatography/low resolution mass spectrometry as described in Attachment 3, page III-54 were used. The quality control/quality assurance procedures followed for the analytical program were according to Attachment 3, page III-61, option 4d and "Regional Technical Assistance for Preparing Quality Assurance Project and Laboratory Plans", ROQA-005/85, revised January, 1986, by Steven R. Lemons, Office of Quality Assurance, Environmental Services Division, USEPA, Region VI (Attachment 4).

Analytical results were communicated by Hercules Incorporated to the EPA RPM and the IT-FAS Project Manager as they became available so that decisions about further sampling could be made. Copies of the summary data report forms, TCDD Final Data Report Form and the GC/MS/MS Worksheet Report Form, for TCDD by semi-

isomer specific procedures and Form B-1S, TCDD Soil Data Report Form for 2,3,7,8-TCDD are included in this report as Appendix B (TCDD) and Appendix C (2,3,7,8-TCDD). Identification of samples corresponding to the sample numbers listed in these data report forms can be found in Tables A-1 and A-2, Appendix A. Copies of the full reports for each sample analyzed are found in Volumes III and IV of this report.

\*This section written by Hercules Incorporated and edited by TMS Analytical Services, Inc.

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#### 9.0 PROJECT DATABASE MANAGEMENT SYSTEM

A Relational Database Management System (RDMS) was used as a sophisticated means of organizing, storing, maintaining, combining, and retrieving sample information. Sample information and analytical data were entered into the system as soon as they were received and routinely screened for accuracy and status changes.

The basic field information was initially recorded on a sample or specimen collection log (see Attachment 5, Figure 1 for an example). This field log was then used to enter the sample data into the computer so that the field information could be linked to the analytical results as soon as they were available. The sample or specimen collection log is considered generic and may contain slots that do not apply to every project; therefore, the collection log headings that are applicable to the fine grid sampling project and which are entered into the database are defined in Table 17. Definitions strictly applicable to analytical data are presented in Table 18.

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#### APPLICABLE COLLECTION LOG AND DATABASE HEADINGS AND DEFINITIONS

#### SAMPLE COLLECTION LOG

#### Sample Number

A unique alphanumeric identification assigned to each sample at the time of collection.

#### Date

The date the sample was collected.

#### Sample Location/Description

Brief comment to describe the location of sample collection including a reference to a pertinent structure or position.

#### Sample Type

CO

Core; samples are collected as a cross section and examined at intervals, other than soil or sediment.

LI

Liquid: any liquid sample that is not water or oil.

SE

Sediment; sample from area of material deposited by water.

S0

Soil; sample of soil.

#### Composite Description (or Units in Composite)

Number indicates number of grabs (aliquots) composited.

NA indicates that sample is composed of materials collected from only one sample point.

#### Elevation

For sediment samples, elevation was used as the depth of water below which the sample was taken (negative numbers). For soil samples, elevation was used for the height above water level.

#### TABLE 17

## APPLICABLE COLLECTION LOG AND DATABASE HEADINGS AND DEFINITIONS (CONTINUED)

#### Depth of Take

Applicable to samples that are to be taken at specific depth below the surface in cores and water.

#### QA/QC Code

#### QBL

Blank; a sample of material and container that have followed the same path unopened or altered to show that there was no extraneous contamination.

#### QDU

Duplicate; two separate samples for the purpose of determining degrees of variation of the sample area (i.e., the wipe sampling of two adjacent areas, two adjacent soil samples) in as nearly identical conditions possible.

#### ORIG

Original sample of a QA/QC sample which requires comparison; reference ORIG and QDU samples.

#### ODM

Composite mixture check sample.

<u>Lab</u> (abbreviated LB in Sample Table A-1)

TM

TMS Analytical Services, Indianapolis, Indiana.

MΚ

IT Analytical Services, Middlebrook Pike, Knoxville, Tennessee.

#### Analysis Request

03

TCDD, if >1 ppb then 2,3,7,8-TCDD.

04

Other analytical parameters (i.e., priority pollutant compounds or waste characterization).

TABLE 17

APPLICABLE COLLECTION LOG AND DATABASE HEADINGS AND DEFINITIONS

(CONTINUED)

Analysis Status (called Sample Status in Tables A-1 and A-2)

Ol
Priority - analyze immediately

O2
Analyze - not a rush sample

O3
Hold - archive status

O4
EPA Split Sample

NOTE: Headings not defined are considered self-explanatory.

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### TABLE 18 ANALYTICAL REPORT ABBREVIATIONS, CODES AND DEFINITIONS

#### Result Sample No.

A unique alphanumeric identification assigned to each sample at the time of collection.

#### Dioxin Units

Concentration units for dioxins such as ng/sample for liquid trip and equipment rinsate QC blanks and parts per billion (ppb; ng/gm;  $\mu$ g/kg) for soils and sediment.

Q

Qualifiers.

<u>U</u>

Compound analyzed for but not detected, value given is the detection limit.

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#### 2,3,7,8-TCDD

Concentration of the 2,3,7,8 isomer of tetrachlorodibenzo-p-dioxin.

#### TCDD

Concentration of some of the tetrachlorodibenzo-p-dioxin isomers present, including 2,3,7,8-TCDD.

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# APPENDIX A

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## APPENDIX A SAMPLE TABLES

TABLE A-1

TABLE A-1 NUMERIC LISTING OF ALL SAMPLES COLLECTED

SAMPLE Number	DATE Sampled	SAM	SAMPLE LOCATION DESCRIPTION	DEPTH OF TAXE		REFERENCE PARTMER LB AREAS	COMPOSITE	STATUS	ANALYSIS REQUEST	
WH 1352	29-JUN-88	SE	SEDIMENT, CONFLUENCE OF EAST AND WEST LEGS OF BOOKY BRANCH CREEK	Erap	3	TH A	NA		03	
MH1353	29 JUN-88	Lŧ	LIQUID, HEXANE EQUIPMENT BINSE		9 GRI	TH A	2 RINSES	D1	03	
MH1354	29 - JUN - 88	50	SOIL, 0-500 FT 6 IN ABOVE MATER, BOCKY BRANCH WEST LEG. LEFT BAN	W 0-3 1n	s	TH A	50 GRABS	01	03	
WHI 355	29 - JUN - 88	50	SOIL 0-500 FT 6 IN ABOVE WATER, MOCKY BRANCH, WEST LEG, RIGHT BA	MK 0-3 in	5	TH A	SO GRABS	61	03	TABLE KEY
WH1356	29-JUN-88	50	SOIL, 0-500 FT 12 IN ABOVE MATER, BOCKY BRANCH, WEST LEG, RIGHT BA	MX 0-3 in	ı	TH A	SO GRABS	03	03	QC - Quality Control
WH1 357	29 · JUN - 88	50	SOIL 0-500 FT 12 IN ABOVE WATER, BOCKY BRANCH, WEST LEG, LEFT BAN	K 0-3 tu	1	A HT	50 GRABS	03	03	QRI - Rinse
WH 1 358	29-JU#-88	LI	ETQUID HEXANE, TRIP BLANK		0 QBL	TH A	RA	Ot	03	QBL - Blank ORIG - Original QDU - Duplicate
WH1 359	29-JUN-88	<b>S</b> 0	SOIL, 0-500 FT 36 IN ABOVE WATER, BOCKY BRANCH, WEST LEG, LEFT BAN	X 0-3 in	3	TH A	50 GRABS	03	03	SPLT - Split QUM - Mix Check
WH 1360	29- JUN-88	50	SOIL, 0-500 FT 36 IN ABOVE WATER, ROCKY BRANCH, WEST LEG, RECHT BA	MX D-3 in	3	TH A	SO CRABS	01	03	LB - Lab
MH1361	30 - JUN - 88	50	SOIL, 510-1000 FT 6 IN ABOVE WATER, BOCKY BRANCH, WEST LEC. LEFT BAN	X 0-3 in	5	TH A	50 GRABS	01	<b>a</b> 3	TM - TMS Analytical Services
HH1362	30- JUN-88	50	SOIL, 510-1000 FT 6 IN ABOVE WATER, ROCKY BRANCH, WEST LEG. RIGHT BA	MK 0-3 in	5	TH A	50 CHARS	DJ	03	Indianapolis, IN
MH1363	30 - JUN - 88	50	SOIL, 510-1000 FT 12 IN ABOVE WATER ROCKY BRANCH, WEST LEG. RIGHT BA	MX 0-3 in	1	TH A	50 GRABS	03	03	MK - IT Analytical Services
MH1364	30 - JUN - 88	50	SOIL, S10-1000 FT 12 IN ABOVE WATER BOCKY BRANCH, WEST LEG. LEFT BAN	K 0-3 1n	1	TH A	50 GRABS	03	03	Middlebrook Pike Knoxville, TN
MH 365	30 - JUN - 88	50	SOLL, S10-1000 FT 36 IM ABOVE WATER ROCKY BRANCH WEST LEC. LEFT BAN	K 0-3 1n	3	TH A	50 GRABS	03	03	Sample Status
MH1 366	30 · JUN· 88	50	SOIL, 510-1000 FT 36 IN ABOVE WATER BOCKY BRANCH, MEST LEC, RIGHT BA	MK 0-3 1n	3	TH A	SO GRABS	03	03	01 - Rush 02 - Analyze (no rush)
98H L367	30-JUN-88	50	SOLL,1010-1500 FT 6 IN ABOVE WATER, BOCKY BRANCH, WEST LEG, LEFT BAN	K 0-3 in.	5	TH A	SO GRABS	01	03	01 - Hold 04 - EPA Split
WH1368	30-JUN-88	50	SOIL.1010-1500 FT 6 IN ABOVE WATER, ROCKY BRANCH, WEST LEG. RIGHT BA	MR 0-Jin	5	TH A	50 GRABS	01	03	Analysis Request
WH1 369	30-JUK-88	\$0	SOIL,1010-1500 FT 12 IN ABOVE WATER ROCKY BRANCH, WEST LEG. LEFT BAN	K 0-1 in	i.	TH A	50 GRABS	<b>U</b> 3	03	03 - TCDD; 2,3,7,8-TCDD
WH1370	30 - JUN-88	<b>S</b> 0	SOIL,1010-1500 FT 12 IN ABOVE WATER ROCKY BRANCH WEST LEG. RIGHT BA	MX 0-3 1n	1	TH A	50 GRABS	03	03	04 - Other Analytical Parameters
14H i 37 i	30-JUN-88	น	LIQUID HEXANE EQUIPMENT RINSE		190 0	TH	NA	03	03	
MH1372	30-JUN-88	50	SOIL 1010-1500 FT 36 IN ABOVE WATER ROCKY BRANCH, WEST LEG. RIGHT BA	MK 0-3 1n	3	TH A	58 GRABS	03	03	
MH1373	30 - JUN - 88	<b>S</b> 0	SOIL, 1016-1500 FT 36 IN ABOVE MATER ROCKY BRANCH WEST LEG. LEFT BAN	K 0-3 in	3	IN A	50 GRABS	93	03	
GRI 374	30 · JUN - 88	<b>\$</b> 0	SOIL, 1516-2000 FT 6 IN ABOVE WATER, ROCKY BRANCH, WEST LEG. RIGHT BA	MK 0-3 1n	5	TH A	50 GRABS	01	03	
MH1 375	30-JUN-88	50	SOIL.1510-2000 FT 6 IN ABOVE WATER. MICKY BRANCH, WEST LEG. LEFT BAN	K 0-3 1n	S ORIG WH	11377 TH A	50 GRABS	01	03	
MH) 376	01 - JUL - 88	ŁĪ	LIQUID, HEXANE, TRIP BLANK		0 OBL	TH A	MA	61	03	

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SAMPLE Number	DATE SAMPLED	SAMP TYPE SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOYE HATER OC OC PARTNER	REFERENCE LB AREAS	UNITS IN COMPOSITE	SAMPLE AMALYSIS STATUS REQUEST	
WH1377	30 JUN-88	SO SOIL,1510-2000 FT 6 IN ABOVE WATER, ROCKY BRANCH, MEST LEG LEFT BANK	0 3 1N	5 QDU 14H1375	TH A	50 GRABS	01 03	
WH1378	01-JUL-88	SE SEDIMENT BOCKY BRANCH, WEST LEG AT VERTAC FENCE	grab	- 4 ORIG MH1391	TH A	MA	01 03	
WH1379	30 - JUN-88	SO SOIL.1510-2000 FT 6 IN ABOVE WATER, BOOKY BRANCH, WEST LEG, LEFT BANK.	0-3 1n	5 SPLT MH1375	TH A	50 CRABS	04 03	
VOH 1 380	01 - JUL - 88	SO SOIL 1510-2000 FT 12 IN ABOVE HATER ROCKY BRANCH, WEST LEC. RIGHT BANK	0-3 in	1	TH A	50 CRABS	03 03	TABLE KEY
WH1381	01-JUL 68	SO SOIL.1510-2000 FT 12 IN ABOVE HATER BOCKY BRANCH, WEST LEG. LEFT BANK	0-3 in	1	TH A	SO GRABS	03 03	QC - Quality Control
WH1 362	10-JUL-68	SO SOIL, 1510-2000 FT 36 IN ABOVE WATER ROCKY BRANCH, WEST LEG RICHT BANK	0-3 an	3	TH A	50 GRABS	03 03	QR1 - Rinse OBL - Blank
WH1383	10 - JUL-68	SO SOIL.1510-2000 FT 36 IN ABOVE HATER ROCKY BRANCH, WEST LEG. LEFT BANK	0-3 In	3	TH A	50 GRABS	43 43	DRIG - Original ODU - Duplicate
WH1384	01 - JUL -88	SO SOIL, 2010-2230 FT 6 IN ABOVE WATER, ROCKY BRANCH, WEST LEG, RICHT BANK	0-3 1n	5	TH A	50 GRABS	01 03	SPLT - Split QDM - Nix Check
WH1385	01 - JUL -88	SO SOIL, 2010-2230 FT 6 IN ABOVE WATER, BOCKY BRANCH, WEST LEG, LEFT BANK	0-3 in	.5	TH A	50 GRABS	01 03	LB - Lab
WH1 386	01-JUL-88	LI LIGUID. HEXANE, EQUIPMENT RINSE		0 QR1	TM A	2 RINSES	03 03	TM - TMS Analytical Services
MH1387	01 - JUL - 88	SO SOIL, 2010-2230 FT 12 IN ABOVE HATER ROCKY BRANCH. MEST LEG. LEFT BANK	0-3 (n	1	TM A	50 GRABS	03 03	Indianapolis, IN
WH 1 388	01 - JUL-88	SO SOIL, 2010-2230 FT 12 IN ABOVE WATER BOCKY BRANCH, WEST LEG, RIGHT BANG	0-3 in	1	TH A	50 CRABS	03 03	MK - IT Analytical Services Middlebrook Pike
WH1389	01-JUL-88	SO SOIL.2010-2230 FT 36 IN ABOVE HATER BOCKY BRANCH, WEST LEG. LEFT BANK	0-3 an	3	TH A	50 GRASS	03 03	Knoxville, TN
MH1390	01 - JUL - 88	SO SOIL, 2010-2230 FT 36 IN ABOVE WATER BOCKY BRANCH, WEST LEG, RICHT BANK	( 0-3 in	3	TH A	50 CRABS	03 03	Sample Status
WH1 39L	01 - JUL - 88	SE SEDIMENT, BOCKY BRANCH, MEST LEG AT VERTAC FENCE	grab	- 4 SPLT MH1378	TH A	MA	04 03	01 - Rush 02 - Analyze (no rush) 03 - Hold
WHI 392	02 - JUL - 88	SO SOIL, BAYOU METO, MPRR, 6 IN FROM WATER, RICHT BANK	0-3 1n	5	TH K	50 CRABS	01 03	04 - EPA Split
WH1 393	02-JUL-88	SO SOIL, BAYOU METO, MPRR, 6 IN FROM WATER, LEFT BANK	0-3 In	5	TH K	50 GRABS	01 03	Analysis Request
<b>WH1</b> 394	03-JUL-88	SO SOIL, BAYOU METO, MPRR, 36 IN FROM WATER, RICHT BANK	0-3 in	3	TH K	50 CRABS	03 03	03 - TCDD; 2,3,7,8-TCDD 04 - Other Analytical
WH1395	03-JUL-88	SO SOIL, BAYOU METO, MPRR, 36 IN FROM MATER, LEFT BANK	0-3 in	3	TH K	50 CRABS	03 03	Parameters
編13%	03 JUL-88	SO SOIL, BAYOU METO, MPRR, 60 IN FROM MATER, RIGHT BANK	0-3 an	5	TH K	50 CRABS	03 03	
WH1 397	03 - JUL - 88	SO SOIL, BAYOU METO, MPRR, 60 IN FROM MATER, LEFT BANK	0-3 in	5	TH K	50 GRABS	03 03	
WHI 398	03-JUL-88	SO SOIL, BAYOU METO, 6 IN FROM WATER, RIGHT BANK	0 3 1n	5 ORIG WHI 399	TH J	SO CRABS	01 03	
WH1 399	03 · JUL - B8	SO SOIL, BAYOU METO 6 IN FROM WATER, RIGHT BAMK	0-3 1n	5 SPLT MH1398	TH J	SO GRABS	04 03	
MH1400	03-JUL 88	SO SOIL, BAYOU METO, 36 IN FROM MATER, RIGHT BANK	0-3 an	1	TH J	50 GRABS	01 63	
MH1401	03-JUL-58	SO SOIL, BAYOU METO, 6 IN FROM WATER, RIGHT BANK	0-3 in	5	TK J	38 GRABS	F1 03	

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TABLE A-1 NUMERIC LISTING OF ALL SAMPLES COLLECTED

	SAMPLE Hunger	DATE Sampled	SAMP Type	SAMPLE LOCATION DESCRIPTION		DEPTH OF	FEET ABOVE MATER OC OC PA	RI ARTHER LB AI		UNIIS IN COMPOSITE		AMALYSIS Request		
	MH1402	03-JUL-88	<b>S</b> 0	SOIL, BAYOU METO, 60 IN. FROM	MATER. RIGHT BANK	P-3 in	5	TH J		SO CRABS	03	03		
	<b>W</b> (1403	03-JVL-88	u	HEXAME EQUIPMENT RINSE.			o ori	TH J		NA	03	03		
	<b>W</b> 1404	04-JUL-88	50	SOIL, BAYOU HETO AT MAY 161 BRIDGE	AT 6 3H FROM WATER, RIGHT BANK	0-3 ia	5	TH L		SO GRABS	01	03		
	WH1405	04 - JUL-88	50	SOIL, BAYOU METO AT MAY 161 BRIDGE	AT 6 IN. FROM WATER LEFT BANK	0-3 in	.5	TH L		42 CRARS	01	03	TABLE KEY	
	GH1406	88-JUL-40	50	SOIL, BAYOU METO AT HMY 161 BRIDGE	AT 36 IN FROM WATER, RIGHT BANK	0-3 in	3	TH L		SO CRASS	03	03	QC - Quality Cont	rol
	MHI 407	04-JUL-88	<b>S</b> 0	SOIL, BAYOU HETO HWY 161 BRIDGE.	36 IN FROM WATER, LEFT BANK	0-3 in	3	TH L		SO CRABS	03	03	QRI - Rinse QBL - Blank	
	<b>(#1</b> 1408	04 JUL-88	<b>S</b> 0	SOIL, BAYOU METO HWY 161 BRIDGE,	60 IN FROM WATER, RIGHT BANK	0-3 in		TH L		50 CRABS	03	03	ORIG - Original QDU - Duplicate	
	MH1409	04-JUL-88	90	SOIL, BAYOU METO HWY 161 BRIDGE.	60 IN FROM WATER, LEFT BANK	0-3 in	5	TH L		SO CRARS	03	03	SPLT - Split QDM - Mix Check	
	MH1410	04-JUL-88	50	SOIL, MANHOLE #2043, SOUTH REDMOND	ROAD	0-3 in	0	TH S		36 CRASS	01	03	LB - Lab	
ъ	WH1411	04-JUL-88	50	SOIL, DRY CREEK BED, NEXT TO ROCKY	BRANCH, SOUTH OF REDMOND BOAD	0-3 in	O ORIG WH14	12 TH H		50 CRABS	01	03	TM - TMS Analytic Services	al
4	WH1412	04 - JUL-88	50	SOIL. DRY CREEK BED NEXT TO ROCKY	BRANCH, SOUTH OF REDMOND ROAD	0·3 in	O COU MH14	11 TH H		50 GRABS	01	03	Indianapolis	
	WH1413	04-JUL-88	50	SOIL, DRY CREEK BED, NEXT TO ROCKY	BRANCH, S OF REDMOND BOAD, EPA SPLIT	0-3 in	D SPLT WHIA	11 TH H		50 CRABS	04	03	HK - IT Analytica Services Niddlebrook	
	MH1414	04-JUL-68	50	SOIL, DRY CREEK BED, 1/4 MILE SOUTH	OF REDWOND RD. NEXT TO ROCKY BRANCH.	0-3 in.	D	TH N		25 GRABS	01	93	Knoxville, T	
	MH1415	04-JUL-88	50	SOIL, 10-500 FT, 6 IN ABOVE WATER,	ROCKY BRANCH, BAST LEG LEFT BANK	0-3 in.	5	TM B		50 CRABS	01	93	Sample Status	
	MH1416	04 JUL 88	<b>SO</b>	SOIL, BLANK			QBL	Th B		MA	01	03	01 - Rush 02 - Analyze (no 03 - Hold	rushj
	MH1417	04-JUL-88	50	SOIL, 10-500 FT, 12 IN ABOVE WATER.	ROCKY BRANCH, BAST LEG. LEFT BANK	0·3 ln.	1	TH B		SO CRABS	03	03	04 - EPA Split	
	MH1418	04-JUL-88	S0	SOIL, 10-SOO FT, 6 IN ABOVE WATER.	ROCKY BRANCH, EAST LEG, BIGHT BANK	0-3 in.	.5	TM B		50 GRABS	01	03	Analysis Request	
	<b>WHI</b> 419	04-JUL 88	<b>S</b> 0	SOIL.10-500 FT 36 IN ABOVE WATER.	ROCKY BRANCH, BAST LEG. LEFT BANK	0-3 in	3	TH B		50 GRASS	03	03	03 - TCDD; 2,3,7,8-TCDD	
	IMI 420	04-JUL-88	<b>S</b> 0	SOIL, 10-500 FT. 12 IN. ABOVE WATER,	ROCKY BRANCH, EAST LEG. RIGHT BANK.	0-3 in	1	TA B		50 GRABS	03	03	04 - Other Analyt Parameters	Icai
	WH1 421	04-JUL-88	<b>S</b> 0	SOIL, BLANK			OBL	TH B	ı	MA.	01	03		
	WH1 422	04-JUL-88	<b>S</b> 0	SOIL, 10-500 FT. 36 IN ABOVE WATER.	ROCKY BRANCH, EAST LEG, RIGHT BANK.	0-J 1a.	3	ти в	ı	50 GRABS	03	03		
	WH1423	04 - JUL - 88	ЬI	LIGUID, HEXANE, EQUIPMENT RINSE			QR1	TH B	1	NA	01	03		
	<b>W</b> 11424	05 - JUL - 88	SO	SOIL, 510-1000 FT 6 IN ABOVE WATER.	ROCKY BRANCH. EAST LEG. RIGHT BANK	0-3 iq.	5	TH B	ı	50 GRABS	01	03		
	WH1425	05-JUL-88	50	SOIL, 510-1000 FT 6 IN ABOVE WATER	ROCKY BRANCH, EAST LEG, LEFT BANK	0-3 in.	5	TM B	1	50 GRABS	01	03		
	MH1426	05 JUL-88	50	SOIL,510-1000 FT 12 IN ABOVE WATER.	ROCKY BRANCH, EAST LEG. RIGHT BANK	D-3 in	1	TH B	1	50 GRABS	03	03		

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SAMPLE Rumben	DATE Sampled		DEPTH OF TAKE	PEET ABOVE WATER OC GC PARTE		UNITS IN COMPOSITE	SAMPLE AMALYSIS STATUS REQUEST	
¥H1427	05-JUL-88	SO SOIL.510-1000 FT 12 IN ABOVE MATER, BOCKY BRANCH, EAST LEG. LEFT BANK	0-3 in	Ι	TH 8	SO GRABS	03 03	
WH1428	05-JUL-88	SO SOIL.510-1000 FT 36 IN ABOVE WATER, BOCKY BRANCH, EAST LEG. RIGHT BANK	0-3 1 <b>n</b>	3	TH B	50 GRABS	03 03	
WH1 429	05-JUL-88	SO SOIL.510-1000 FT 36 IN ABOVE WATER, ROCKY BRANCH, EAST LEG, LEFT BANK	0-3 in	3	TH B	50 GRABS	03 03	
WH1430	05-JUL-88	SO SOIL, 1010-1500 FT 6 IN ABOVE WATER, ROCKY BRANCH, EAST LEG, RICHT BANK	0-3 in	5	TH B	46 GRABS	01 03	TABLE KEY
WHI 431	05-JUL-88	SO SOIL,1010-1500 FT 6 IN ABOVE MATER, ROCKY BRANCH, EAST LEG. LEFT BANK	0-3 in	5	TH B	46 GRABS	01 03	QC - Quality Control
MH1432	05 - JUL - 68	SO SOIL,1818-1508 FT 12 IN ABOVE MATER ROCKY BRANCH, EAST LEG. RIGHT BANK	0-3 in	1	TH B	46 CRABS	03 03	QRI - Rinse QBL - Blank
WK1433	05-JUL-88	50 SOFL,1810-1500 FT 12 IN ABOVE WATER ROCKY BRANCH, EAST LEG, LEFT BANK	0-3 in	1	TH B	46 GRABS	<b>6</b> 3 03	ORIG - Original QDU - Duplicate
MR1434	05-JUL-88	50 SOIL, 1010-1500 FT 36 IN ABOVE MATER ROCKY BRANCH EAST LEG. RIGHT BANK.	0-3 in	3	TH B	46 GRABS	03 03	SPLT - Split QDM - Hix Check
MH1435	05-JUL-88	SO SOIL, 1010-1500 FT 36 IN ABOVE WATER BOOKY BRANCH, EAST LEG. LEFT BANK	0-3 in.	3	TH B	46 GRABS	D3 03	IB - Lab
MH1436	05-JUL-88	50 SOIL, 1510-2000 FT 6 18 ABOVE MATER, ROCKY BRANCH, EAST LEG, RIGHT BANK	0-3 in.	.5	TH B	44 GRABS	01 03	TM - TMS Analytical Services
MH1437	05 JUL-88	SO SOIL.1510-2000 FT 6 IN ABOVE MATER, ROCKY BRANCH, EAST LEG, LEFT BANK	0-3 1n.	5	TM B	44 GRABS	01 03	Indianapolis, IN
MH1438	05-JUL-88	50 SOIL.1510-2000 FT 12 IN ABOYE WATER ROCKY BRANCH, EAST LEG. RIGHT BANK.	0-3 in.	1	TH B	44 GRABS	03 03	MK - IT Analytical Services Middlebrook Pike
WH1439	OS JUL 88	SO SOIL, 1510-2000 FT 12 IN ABOVE WATER ROCKY BRANCH, EAST LEG, LEFT BANK	0-3 IR	l.	TH B	44 GRABS	03 03	Knoxville, TN
MH1440	05 - JUL - 88	SO SOIL, 1510-2000 FT 36 IN ABOVE WATER ROCKY BRANCH, EAST LEG. RIGHT BANK	0-3 7 <b>u</b>	3	TH 8	44 GRABS	03 03	Sample Status
MH1441	05 · JUL · 88	SO SOIL.1510-2000 FT 36 IN ABOVE MATER ROCKY BRANCH. EAST LEG, LEFT BANK	0-3 in	3	TM 8	44 GRABS	03 03	01 - Rush 02 - Analyze (no rush) 03 - Hold
Mf1442	05-JUL-88	LT LEGUTO, HEXAME, BOUIPMENT BINSE.		ORI	TM 8	M	01 03	04 - EPA Split
MH1443	05-JUL-88	50 SOIL.2010-2500 FT 6 IN ABOVE WATER, BOCKY BRANCH, EAST LEG, LEFT BANK	0-3 in.	5	TH S	50 CRABS	01 03	Analysis Request
<b>W</b> ()444	05-JUL-88	SO SOEL, 2010-2500 FT 6 IN ABOVE WATER, ROCKY BRANCH, EAST LEG. RIGHT BANK	0-3 in.	5	TH B	50 GRABS	01 03	03 - TCDD; 2,3,7,8-TCDD 04 - Other Analytical
<b>W</b> 11445	05-JUL-B8	SO SOIL, 2010-2500 FT 12 IN ABOVE WATER BOCKY BRANCH, EAST LEG. LEFT BANK	0-3 in	1	TH B	50 GRABS	03 03	Parameters
HH1446	07-JUL-88	SO SOIL, BLANK		0 OBL	TM C	NA	0) 03	
<b>SH</b> 1447	P" InL-88	SO SOIL, 2010-2500 FT 36 IN ABOVE WATER ROCKY BRANCH, EAST LEG. LEFT BANK.	0-3 in	3	TH 8	50 GRABS	03 03	
WHI 448	07-JUL-88	LI LIQUID HEXANE. EQUIPMENT RINSE		CRE	TH C	KA.	01 03	
WHI 449	10 - JUL - 68	SO SOIL, 2510-2940 FT 6 IN ABOVE WATER, EAST BOCKY BRANCH, LEFT BANK	0-3 ın	5 ORIG WHI450	TH A	37 GRABS	61 03	
WH1450	10-JUL-88	SO SOFE, 2510-2940 FT 6 IN ABOVE SMATER, EAST ROCKY BRANCH, LEFT BANK	0-3 in	5 QDU ##11449	TH A	37 GRABS	01 03	
I#11451	10 · JUL - 88	SO SOIL, 2510-2940 FT 6 IN ABOVE MATER, E ROCKY BRANCH LEFT BANK EPA SPLIT	0-3 in	5 SPLT 981449	TH A	37 CRABS	04 03	

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TABLE A-1 HUMERIC LISTING OF ALL SAMPLES COLLECTED

	SAMPLE AUMBER	DATE SAMPLED	SAMP TYPE SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE Mater oc oc partner	REFERENCE LB AREAS	COMPOSITE	SAMPLE ANALYSIS STATUS REQUEST	
	WH1452	06 JUL 80	SO SOIL, 2 FT FROM MATERS EDGE AROUND THE PERIMETER OF LAKE DUPREE	0-3 10	0	IM I	30 CRABS	01 03	
	HH1453	07-JUL-86	SO SOIL, BOM 1, SOUTH 0-250 FEET, EAST ROCKY BRANCH	0-3 1m	0	TH C	55 GRABS	01 03	
	MH1454	07-JUL-88	SO SOEL, ROM 1, NORTH, 0-250 FEET, EAST ROCKY BRANCH	D-3 1n.	0	TH C	55 GRABS	01 03	
	IHI 4SS	<b>0</b> 7 JUL-88	SO SOIL, ROW 1, EAST 0-250 FEET, EAST ROCKY BRANCH	D-3 1m	0	TH C	SS GRABS	01 03	TABLE KEY
	WH1456	07-JUL-88	SO SOIE, ROM 2, SOUTH, 0-250 FEET, EAST ROCKY BRANCH	D-3 1R	ð	TH C	53 CRABS	83 83	QC - Quality Control
	MH1457	07-JUL-88	SO SOIL, ROW 2, NORTH, D-250 FEET, EAST ROCKY BRANCH	D-3 an	0	TH C	53 CRARS	03 03	QRI - Rinse OBL - Blank
	MH1458	07-JUL-88	SO SOIL, ROW 2, EAST, 0-250 FEET, EAST ROCKY BRANCH	0 3 in.	0	TH C	53 GRABS	03 63	ORIG - Original QDU - Duplicate
	I#f1 459	07-JUL-88	50 SOIL, ROW 1, NORTH, 500-750 FEET. EAST ROCKY BRANCH	B-3 1n	0	TM C	50 GRABS	01 03	SPLT - Split QDM - Mix Check
	WH1460	07-JUL-88	50 SOTE, ROW 1, SOUTH, 500-750 FEET, EAST MOCKY BRANCH	0-3 10	0	TH C	SO GRABS	01 03	LB - Lab
	WH1461	07-JUL-88	SO SOIL. BOW I, EAST, 500-750 FEET. EAST ROCKY BRANCH	0-3 1n.	a	TH C	50 GRARS	01 03	TM - TMS Analytical Services
	M1462	07-JUL-88	LL LIQUID, HEXAME, TRIP BLANK		0 GBL	TH C	M	01 03	Indianapolis, IN
•	WH1 463	07-JUL-88	SO SOIL, ROW 2, NORTH, SOO-750 FEET. EAST ROCKY BRANCH	0-3 in	0	тн с	50 GRABS	03 03	MK ~ IT Analytical Services Middlebrook Pike
	WH1 464	07 - JUL - 68	SO SOIL. NOW 2, SOUTH, 500-750 FEET, EAST ROCKY BRANCH	0-3 In.	0	TN C	50 GRABS	03 03	Knoxville, TN
	WH1465	07-JUL-88	SO SOIL, BOW 2, EAST, SOO-750 FEET EAST BOOKY BRANCH	0-3 In.	0	TH C	SO GRABS	03 03	Sample Status
	WH1 466	07-JUL-88	SO SOIL, BOW 1, MORTH, 750-1000 FEET, BAST ROCKY BRANCH	0-3 IN	0	TH C	47 GRABS	01 03	01 - Rush 02 - Analyze (no rush) 03 - Hold
	WH1467	08 JUL 88	SO SOIL, ROW 1, SOUTH, 750-1000 FRET, BAST ROCKY BRANCH	0-3 in	0 ORIG MH1468	TH C	47 CRABS	01 03	04 - EPA Split
	MH1468	08-JUL-88	SO SOIL, BOW 1. SOUTH, 750-1000 FEET, EAST BOCKY BRANCH	0-3 in.	0 QOU WH1467	TH C	47 CRABS	01 03	Analysis Request
	MH1469	08 JUL-88	SO SOIL, BOW 1, EAST, 750-1000 FEET, EAST BOOKY BRANCH	0-3 in	0	TH C	47 CRABS	01 03	03 - TCDD; 2,3,7,8-TCDD 04 - Other Analytical
	MH1470	08 - JUL - 88	SO SOIL, ROW 2. EAST, 750-1000 FEET. EAST ROCKY BRANCH	0-3 1n	0	TM C	41 GRABS	03 03	Parameters
	WH1471	08 JUL-88	SO SOIL BLANK		O GAL	TH C	HA.	01 03	
	WH1472	08-JUL-89	SO SOIL, ROW 2, NORTH, 750-1000 FEEY, EAST ROCKY BRANCH	0-3 an	Û	TH C	41 CRABS	03 03	
	WH1473	08-JUL-88	SO SOIL, ROW 2, SOUTH 750-1000 FEET, EAST ROCKY BRANCH	0-3 in.	0	TH C	41 GRABS	03 03	
	MH1474	08-JUL-88	SO SOIL, ROW 1, EAST, 1000 FT TO 1250 FT, EAST ROCKY BRANCH	0-3 1m	0	TH C	46 GRARS	01 03	
	WH1475	08 - JOL - 88	SO SOLL, ROW 1, MORTH 1000 FT TO 1250 FT, EAST ROCKY BRANCH	0-3 in	0	TH C	46 CRABS	01 03	
	WH1476	08 JUL-88	SO SOIL, ROW 1, SOUTH 1000 FT TO 1250 FT, BAST ROCKY BRANCH	0 3 in	0	TH C	46 GRABS	01 03	

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TABLE A-1 NUMERIC LISTING OF ALL SAMPLES COLLECTED

	SAMPLE MANDER	DATE SAMPLED	SAMP TYPE SAMPLE LOCATION DESCRIPTION		FERT Above Rater oc oc partner	REFERENCE LB AREAS	UNITS IN COMPOSITE		ANALYSIS REQUEST	
	MH1477	08- JUL-88	SO SOIL, ROM 2, MORTH, 1000 FT TO 1250 FT. EAST ROCKY BRANCH	0-3 in	0	TH C	43 GRABS	01	03	
	WH1478	08-JUL-88	SO SOIL, ROM 2, SOUTH, 1000 FT TO 1250 FT, EAST ROCKY BRANCH	0-3 1a	0	TH C	43 GRABS	01	03	
	WH1479	08- JUL-88	SO SOIL. ROW 2. EAST, 1000 FT TO 1250 FT, EAST ROCKY BRANCH	0-3 in	0	TH C	43 CRABS	10	03	
	MH1480	08 · JUL · 88	SO SOIL, ROW I, MORTH, 1250 FT TO 1500 FT, EAST ROCKY BRANCH	0-3 in.	0	ти с	46 CRABS	01	03	TABLE KEY
	WH1 481	08-JUL-88	SO SOIL, BOW 1, SOUTH 1250 FT TO 1500 FT, EAST BOCKY BRANCH	0-3 in	0	TH C	46 GRABS	01	03	QC - Quality Control
	₩11482	08- JUL-88	LI LIQUID, HEXANE, EQUIPMENT RINSE.		0 CHI	TH C	MA	01	03	QRI - Rinse QBL - Blank
	WH1483	08-JUL-88	SO SOIL, BOW 1, EAST, 1250 FT TO 1500 FT, EAST ROCKY BRANCH	0-3 in	0	TM C	46 GRABS	01	03	ORIG - Original QDU - Duplicate
	MH1484	08-JUL 88	SO SOIL, ROW 2, EAST, 1250 FT TO 1500 FT, EAST ROCKY BRANCH	0-3 in	0	TH C	43 CRABS	03	03	SPLT - Split QDM - Mix Check
	MH1485	08- JUL-86	SO SOIL, BOM 2, WORTH, 1250 FT TO 1500 FT, EAST ROCKY BRANCH	0-3 in	D	TH C	43 GRABS	03	03	LB - Lab
	WH1 486	08-JUL-88	SO SOIL, ROW 2. SOUTH, 1250 FT TO 1500 FT, EAST ROCKY BRANCH	0-3 in.	0	TH C	43 CRABS	03	03	TM - TMS Analytical Services
1	WH1487	09-JUL-88	SO SOIL, ROW 2, MORTH, 1500 FT TO 1750 FT, EAST BOCKY BRANCH	0-3 in.	0	TH C	50 GRABS	03	03	Indianapolis, IN
	MH1480	09 JUL-89	SO SOIL. NOW 2, SOUTH, 1500 FT TO 1750 FT EAST BOCKY BRANCH	0-3 in.	0	TH C	50 CRABS	03	03	MK - IT Analytical Services Middlebrook Pike
	MH1489	09-JUL-88	SO SOIL, ROW 2. EAST 1500 FT TO 1750 FT. EAST ROOKY BRANCH	0-3 in	0	TH C	SO CRASS	03	03	Knoxville, TN
	<b>W</b> 11490	09 · JVI. · 88	SO SOIL, ROW 1. EAST, 1500 FT TO 1750 FT EAST ROCKY BRANCH	0-3 in	0 ORIG WH1493	TM C	48 GRABS	01	03	Sample Status
	M1491	09-JUL-88	SO SOIL, ROW 1, SOUTH, 1500 FT to 1750 FT, EAST ROCKY BRANCH	0-3 in	0	TH C	4B GRABS	61	03	01 - Rush 02 - Analyze (no rush) 03 - Hold
	WH1492	09-JUL-88	SO SOIL, ROW 1, MORTH, 1500 FT to 1750 FT, EAST ROCKY BRANCH	0-3 in	0	TH C	48 CRABS	01	93	04 - EPA Split
	網1493	09-JUL-88	SO SOIL, BON 1, EAST, 1500 FT TO 1750 FT, EAST ROCKY BRANCH	0-3 in	0 QDU WH1490	EM C	48 GRABS	01	03	Analysis Request
	MH14941	09-JUL-88	SO SOIL, BOW 1. EAST.1500-1750 FT.EAST R BRANCH, A GUAD MIX CHECK	0·3 in	0 GDM WH1490	TH C	48 GRABS	01	93	03 - TCDD; 2,3,7,8-TCDD 04 - Other Analytical
	MH14958	09 · JUL · 68	SO SOIL. NOM 1, EAST, 1500-1750 FT EAST R. BRANCH B QUAD MIX CHECK	0-3 in	0 QDH MH1490	TH C	48 GRABS	Φl	03	Parameters
	WHI 496C	09 - JUL - 88	SO SOIL, ROW 1, EAST, 1500-1750 FT, EAST R BRANCH, C QUAD MIX CHECK	0-3 in	0 QDM MH1490	TH C	48 CRARS	01	03	
	WII 497D	09-JUL-88	SO SOIL, ROW 1, EAST, 1500-1750 FT, EAST R BRANCH, D QUAD MIX CHECK	0-3 in	0 QCH MH1490	ти с	48 GRABS	01	03	
	WH1498	09-JUL-88	SO SOIL, ROW 1, EAST, 1750 FT TO 1880 FT, EAST ROCKY BRANCH	0-3 in		TH C	26 CRASS	01	03	
	WH1 499	09-JUL-88	SO SOIL, ROW 1, MORTH, 1750 FT TO 1880 FT, BAST ROCKY BRANCH	0-3 in.	0	TH C	26 CRABS	01	03	
	WH2000	09-JUL-88	SO SOIL ROW 1, SOUTH, 1750 FT TO 1880 FT EAST ROCKY BRANCH	0-3 an	0	TH C	26 GRABS	01	03	
	WH2001	09-JUL-88	SO SOIL. ROW 2, EAST, 1750 FT TO 1880 FT, EAST ROCKY BRANCH	0-3 in	0	TH C	26 GRABS	03	03	

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#### TABLE A-1 NUMERIC LISTING OF ALL SAMPLES COLLECTED

SAMPLE Mansen	DATE SAMPLED	SAMP TYPE SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE HATER GC GC PART	NER LB AREAS	UNITS IN COMPOSITE		ANALYSIS REGUEST	
WR2002	09-JUL-88	SO SOIL, ROW 2, MORTH, 1750 FT TO 1880 FT, EAST MOCKY BRANCH	0-3 In.	0	TH C	26 GRABS	03	83	
WH2003	09 - JUL - 88	SO SOIL, ROW 2, SOUTH, 1750 FT TO 1880 FT, EAST ROCKY BRANCH	0-3 in	0	TH C	26 GRABS	03	03	
<b>4H</b> 2004	09-JUL-88	SO SOIL ROW 1. MORTH, 250-500 FEET, EAST ROCKY BRANCH	0-3 IN	D	TH C	50 GRARS	01	03	
MH2005	09-JUL-88	SO SOIL, BOW 1, SOUTH, 250-500 FEET. EAST ROCKY BRANCH	0-3 in	0	TH C	50 GRABS	01	93	TABLE_KEY
MH2006	09-JUL-88	SO SOIL, BON 1, EAST 250-500 FEET. EAST BOOKY BRANCH	0-3 in	D	TH C	50 GRABS	61	03	QC - Quality Control
MH2007	09-JUL-88	SO SOIL, BON 2. NORTH, 250-500 FEET, EAST BOOKY BRANCH	0-3 1m	0	TH C	50 GRABS	03	03	QRI - Rinse
<b>M</b> 12008	09-JUL-88	SO SOIL BON 2, SOUTH, 250 "00 FEET, EAST BOCKY BRANCH	0-3 in	0	TH C	50 GRABS	03	03	OBL - Blank ORIG - Original
MH2009	09-JUL-88	SO SOIL. ROW 2, EAST, 250-500 FEET, EAST BOCKY BRANCH	0-3 in	0	TH C	50 CRABS	63	03	QDU - Duplicate SPLT - Split QDM - Mix Check
<b>WH</b> 2010	09-JUL- <b>68</b>	LI LEGUED, HEXANE, COULTMENT RINSE.		100 0	TH A	MA	61	03	LB - Lab
WH(2011	10-JUL-88	SO SOIL,2510-2940 FT,12 IN ABOVE WATER EAST ROCKY BRANCH, LEFT SAME	0-3 in	.5	TH A	37 GRABS	03	03	TM - TMS Analytical
<b>WH2</b> 012	10-JUL-88	50 SOLL, 2010-2500 FT. 12 IN ABOVE WATER EAST ROCKY BRANCH, RIGHT BANK.	0-3 in.	5	TH A	SO GRABS	03	03	Services Indianapolis, IN
MH2013	10-JUL-88	SO SOIL.2510-2940 FT.36 IN ABOVE WATER EAST ROCKY BRANCH, LEFT BANK	0-3 in.	3	TH A	37 GRABS	03	<b>0</b> 3	MK - IT Analytical Services
<b>16</b> (20)4	10-JUL-88	SO SOIL.2010-2500 FT.36 IN ABOVE WATER EAST BOOKY BRANCH, RIGHT BANK.	0-3 an	3	TH A	50 GRABS	03	<b>0</b> 3	Middlebrook Pike Knoxville, TN
MH2015	10 JUL-88	SO SOIL BLANK		0 QBL	TH A	MA	01	03	Sample Status
<b>M</b> 12016	10-JUL-88	SO SOIL.2510-2940 FT.6 IN ABOVE WATER, EAST BOOKY BRANCH RICHT BANK	0-3 1n	.5	TH A	37 GRABS	01	03	01 - Rush 02 - Analyze (no rush)
<b>SA</b> 12017	10 JUL-88	LI LIGUID. MEXANE. EQUIPMENT RINSE		0 041	TH C	MA	01	03	03 - Hold 04 - EPA Split
WH2018	10-JUL-88	SO SOIL.2519-2940 FT 12 IN ABOVE WATER EAST ROCKY BRANCH. RIGHT BANK	0-3 IB.	1	TH A	37 GRABS	01	03	Analysis Request
WH2019	10-JUL-88	SO SOIL, BOW 2. WEST, 0-250 FT WEST BOCKY BRANCH	0-3 in	0	TN C	51 GRABS	01	<b>Q3</b>	03 - TCDD; 2,3,7,8-TCDD
M12020	10-JUL-88	SO SOIL, 2510-2940 FT, 36 IN ABOVE WATER EAST BOOKY BRANCH, RIGHT BANK	0-3 in	3	TN A	37 GRABS	03	03	04 - Other Analytical Parimeters
<b>W</b> 12021	10 JUL 88	SO SOIL, BOW 2, WORTH, 0-250 FT, WEST BOCKY BRANCH	0-3 In	0	IN C	51 GRABS	01	03	
WH2022	10-JUL 88	SO SOIL, BOW 1, SOUTH 0-250 FT , WEST MOCKY BRANCH	0-3 in	В	TH C	SI GRARS	61	83	
<b>VAK2</b> 023	10-10F-68	SO SOIL, BOW 1, WORTH 0 250 FT - WEST BOCKY BRANCH	ne 8-0	•	TH C	53 CRARS	91	נס	
<b>181</b> 2024	10 · JUL · 88	SO SOIL, BOW I, WEST, O 250 FT WHEST BOCKY BRANCH	0-3 in	0	тис	53 GRABS	01	03	
MH2025	10-JUL-88	SO SOIL, ROW 1, SOUTH, 0-250 FT , MEST BOCKY BRUNCH	0-3 in	0	тн с	53 GRABS	61	83	
WH2026	11-JUL-68	SO SOIL, OLD SLUDGE DRYING BEDS, OLD TREATMENT PLANT	0 3 in	8 ORIG WH2027	TR EI	71 GRARS	61	01	

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TABLE A-1 NUMERIC LISTING OF ALL SAMPLES COLLECTED

SAMPLE Mumber	DATE Sampled	SAMP TYPE SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE NATER GC GC PARTNER	REFERENCE LB AREAS	COMPOSITE	SAMPLE AMALYSIS STATUS REQUEST	
WH2027	11-J9L-88	SO SOIL, OLD SLUDGE DRYING BEGS, OLD TREATHERT PLANT	0-3 1a	0 QDU WH2026	TH E1	73 GRABS	01 03	
WH2028	11 · JUL-88	SO SOIL, OLD SLUDGE DRYING BEDS, OLD TREATMENT PLAN EPA SPLIT	D-3 in	O SPLT MH2026	TH ES	73 GRABS	04 93	
MH2029	11-JUL-88	SO SOIL, PERIMETER OF OLD DRYING BEDS, OLD TREATMENT PLANT	0-3 in	0	TH E1	66 GRABS	01 03	
MH2030	11 · JUL - 88	SO SOIL, AREA AROUND THE CLARIFIERS AT THE OLD SENAGE TREATMENT PLANT	0-3 in.	0	TH E2	39 GRABS	01 03	TABLE KEY
WH2031	11 JUL 88	SO SOIL, BOW 1. WORTH, 250-500 FEET. MEST BOOKY BRANCH	0-3 in	0	TH C	SO GRABS	01 03	QC - Quality Control
MH2032	11 · JUL · 68	SO SOIL, BOW 1, SOUTH, 250-500 FEET WEST ROCKY BRANCH	0-3 in.	0	TH C	50 GRABS	01 03	QRI - Rinse QBL - Blank
WH(2033	11-JUL-88	SO SOIL, BOW 1, WEST, 250-500 FEET. WEST ROCKY BRANCH	D-3 1N.	ø	TH C	50 GRABS	01 03	ORIG - Original QDU - Duplicate
MHZ034	11-JUL-68	SO SOIL, BON 2, MEST, 250-500 FEET, MEST ROCKY BRANCH	0-3 in	0	TH C	50 GRABS	01 03	SPLT - Split QDM - Mix Check
MH2035	11-JUL-88	SO SOIL, ROW 2, MORTH, 250-500 FEET, MEST ROCKY BRANCH	0-3 in	0	TH C	50 CRABS	01 03	LB - Lab
WH2036	11 · JUL - 68	SO SOIL, ROM 2. SOUTH, 258-500 FEET. MEST BOCKY BRANCH	0-3 in	D	ти с	50 GRABS	01 03	TM - TMS Analytical Services
WH2037	LI - JUL -88	SO SOIL, ROW 1, MORTH, 500-750 FEET. HEST BOCKY BRANCH	0-3 in	0	TH C	48 GRABS	01 03	Indianapolis, IN
MH2038	11-JUL-88	SO SOIL, ROW B. SOUTH 500-750 FEET. WEST BOCKY BRANCH	0-3 in	0	TH C	48 GRABS	01 03	MK - IT Analytical Services Middlebrook Pike
WH2039	11 JUL-88	SO SOIL, ROW 1. WEST, 500-750 FEET. WEST BOCKY BRANCH	.a. C-0	D ORIG MH2040	TH C	48 GRABS	01 03	Knoxville, TN
MH2040	11-JUL-88	SO SOIL, ROW 1. WEST 500-750 FEET. WEST ROCKY BRANCH	0-3 in	0 QDU MH2039	тн с	48 GRABS	01 03	Sample Status
<b>18</b> 12041	11-JUL-88	SO SOIL, ROW 1. WEST SOO-750 FEET. W BOCKY BRANCH, EPA SPLIT.	0-3 in.	0 SPLT MH2039	c	48 GRABS	94 03	01 - Rush 02 - Analyze (no rush) 03 - Hold
WHZ042	11-JVL-88	SO SOIL, BON 2, SOUTH, 500-750 FEET MEST ROCKY BRANCH	0-3 in	0	IM C	45 GRABS	D1 D3	04 - EPA Split
<b>141</b> 2043	11-JUL-88	SO SOIL, BOW 2. MEST 500-750 FEET MEST ROCKY BRANCH	0-3 1n	a	TH C	45 GRABS	01 03	Analysis Request
<b>M12</b> 044	11-JUL-88	SO SOIL, ROW 2, MORTH, 500-750 FEET. MEST BOCKY BRANCH	0-3 in	9	TH C	45 CRARS	01 03	03 - TCDD; 2,3,7,8-TCDD 04 - Other Analytical
MH2045	i I - JUL - 88	SE SEDIMENT, BAST BOCKY BRANCH AT 1704 HILL BOAD PROPERTY LINE	grab	- 25 ORIG WH2046	TH 8	MA	01 03	Parameters
<b>W</b> 12046	11 - JUL - 88	SE SEDIMENT, EAST BOCKY BRANCH AT 1704 HILL ROAD PROPERTY LINE	grab	- 25 QOU WH2045	TH B	NA	01 03	
MH2047	11-JUL-88	SE SEDIMENT, EAST ROCKY BRANCH AT 1784 HILL ROAD PROPERTY LINE, EPA SPLIT	0-1 in	- 25 SPLT WH2045	8	NA.	04 03	
WH2048	11-JUL-88	LI LIQUID. HEXAME, TRIP BLANK		0 OBL	TH C	KA	01 03	
WH2049	13-JUL-88	SO SOIL. HANHOLE #2734, EAST, 608 CAKLEY LAME	0-3 in	0	TH C	8 GRABS	01 03	
WH 2050	13-30L-88	SO SOIL, MANHOLE #2734, SOUTH, 608 OAKLEY LAME	0-3 ja	0	TH C	8 GRABS	81 03	
MH2051	13-JUL-68	SO SOIL. BLANK		0 GBL	TH C	MA	01 03	

TABLE A-1 NUMERIC LISTING OF ALL SAMPLES COLLECTED

	SAMPLE MUHBER	DATE Sampled	SAME TYPE	SAMPLE LOCATION DESCRIPTION		DEPTH OF TAKE	FEET ABOVE WATER GC	OC PARTHER	REFERENCE LB ABEAS	UNITS IN COMPOSITE	STATUS	ANALYSIS REQUEST	
	MH2052	13-JUL-88	50	SOTE, HAMHOLE #2734, NEST, 608 OAKLEY		0-3 IU	0		TH C	8 GRABS	01	03	
	MH2053	13 JUL-88	50	SOIL ROW 1, SOUTH, 750-930 FEET,	NEST ROCKY BRANCH	0-3 in	D		TH C	36 GRABS	01	03	
	MH2054	13-JUL-88	<b>SO</b>	SOLL, ROW 1. MORTHY, 750-930 FEET	MEST ROCKY BRANCH	0-3 in	D ORIG	HIX	TM C	36 CRABS	01	03	
	WH2055A	13-JUL-88	\$0	SOIL, NOW 1. MORTH 750-930 FEET.	W. ROCKY BRANCH.MIX CHECK A	0-3 IU	D COM	MH2054	TH C	36 GRABS	01	03	TABLE KEY
	M20568	13-JUL-88	50	SOIL. ROW 1. MORTH, 750-930 FEET,	W ROCKY BRANCH MIX CHECK B	0-3 in	0 000	MH2054	TM C	36 GRABS	01	03	QC - Quality Control
	WH2057C	13-JUL-88	50	SOIL. NOW 1. MORTH, 750-930 FEET.	N ROCKY BRANCH, HIX CHECK C	0-3 in	0 000	MH2054	TH C	36 CRABS	01	03	QRI - Rinse QBL - Blank
	WH2058D	13-JUL-88	SO	SOIL, NOW 1, MORTH, 750-930 FEET.	W BOCKY BRANCH, MIX CHECK D	0-3 in.	0 QOM	MH2054	TH C	36 CRABS	01	03	ORIG - Original QDU - Duplicate
	MH2059	13-JUL-88	50	SOIL, NOW 1, WEST, 750-930 FEET,	MEST BOCKY BRANCH	0-3 in	0		TH C	36 CRABS	01	03	SPLT - Split QDM - Mix Check
	WH2060	13-JUL-88	50	SOIL, BOW 2, WEST, 750-930 TEET.	MEST BOCKY SRANCH	0-3 in	0		TH C	36 GRABS	01	03	I.B - Lab
_	WH2061	13-JUL-88	50	SOEL, ROW 2, MORTH, 750-930 FEET.	WEST ROCKY BRANCH	0-3 in	0		TH C	36 GRABS	01	03	TM - TMS Analytical Services
5	WH2062	13-JUL-88	LI	EQUIPMENT DINSE HEXANE			0 051		TH C	MA	0ı	03	Indianapolis, IN
	MH2063	10-JUL-88	<b>5</b> 0	SOIL. ROW 2. SOUTH, 750-930 FEET,	WEST BOOKY BRANCH	0-3 in.	0		TH C	36 GRABS	01	03	MK - IT Analytical Services Middlebrook Pike
	MH2064	(1-JUL-88	<b>S</b> 0	SOIL, BLANK			0 QBL		TH C	NA	01	03	Knoxville, TN
	MK2065	13-JUL-68	50	SOIL, ROW 1. WEST, 2113 WEST LANE		0-3 an	0 ORIG	WH2066	TH C	25 GRABS	01	03	Sample Status
	WH2066	13-JUL-88	<b>S</b> 0	SOIL, ROW 1. WEST. 2113 WEST LAME		0-3 in	9 000	WH2065	TH C	26 GRABS	61	03	01 - Rush 02 - Analyze (no rush) 03 - Hold
	WH2067	13 · JUL · 88	50	SOIL, ROW 1, MORTH, 2113 HEST LAME		0-3 in	0		TM C	26 CRARS	Dì	03	04 - EPA Split
	WH2068	13 · JUL · 68	50	SOIL, ROW 1, SOUTH, 2113 WEST LANE		0-3 10	0		TH C	26 CRABS	91	03	Analysis Request
	MH2069	13-JUL-88	50	SOIL, ROW 2, WEST, 2113 WEST LANE		0-3 in	0		TH C	22 GRABS	03	03	03 - TCDD; 2,3,7,8-TCDD 04 - Other Analytical
	MH2070	13-JUL-88	<b>S</b> 0	SOTE, ROW 2, MORTH, 2113 WEST LAME		0-3 tn	0 .		TH C	22 GRABS	03	<b>0</b> 3	Parameters
	WH2071	13-JUL-88	50	SOIL. BOW 2, SOUTH 2113 WEST LAME		0-3 in	0		TH C	22 GRARS	03	03	
	<b>WH20</b> 72	13-JUL-88	L	LIQUID. HEXAME, TRIP BLANK			0 OBL		TH C	MA	91	03	
	MH2073	14-JUL-88	50	SOIL, ROW 1. WEST. 2111 HEST LANE		0-3 1n	0		TH C	11 GRABS	01	03	
	MH2074	14 - JUL -88	50	SOIL, ROW 1. MORTH, 2111 WEST LAME		0-3 ın	8		TH C	11 GRABS	01	03	
	MH2075	14-JUL-88	50	SOIL, ROW 1, SOUTH, 2111 WEST LAME		0-3 in	0		TM C	11 GRABS	01	03	
	<b>WH20</b> 76	14-JUL-88	\$0	SOIL ROW 2 WEST 2111 HEST LAME		0-3 in	0		TH C	14 GRABS	03	03	

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#### TABLE A-1 HUMERIC LISTING OF ALL SAMPLES COLLECTED

	SAMPLE Manden	DATE SAMPLED	SAMP TYPE SAMPLE LOCATION DESCRIPTION	DEPTH OF Take	FEET ABOVE HATER OC OC PARTNE	REFERENCE R LB ARBAS	UNITS IN COMPOSITE	SAMPLE ANALYSIS STATUS REQUEST	
	MH2077	14 JUL-88	50 SOIL, ROW 2, SOUTH, WEST LAME	0-3 in	0	TH C	14 GRABS	03 03	
	MC2078	14 - JUL - 88	SO SOIL, BOW 2 MORTH 2111 WEST LANE	0-3 in	0	TH C	14 CRABS	03 03	
	WH2879	14-JUL-88	SO SOIL BLANK.		0 QBL	тв с	ж	01 03	
	MH2060	14-JUL-88	SO SOIL, ROW 1. MORTE 2112 HEST LAME.	0-3 in	. 0	TH C	15 GRABS	01 03	TABLE KEY
	<b>HH2</b> 081	14-JUL-88	SO SOIL, ROW 1, SOUTH, 2112 WEST LANE	0-3 in	8	TH C	15 CRABS	01 03	QC - Quality Control
	<b>442</b> 08.	14-JUL-88	SO SOIL, ROW 1, WEST, 2112 WEST LANE	0-3 in	0	TH C	15 CRASS	01 03	QRI - Rinse
	<b>WH2</b> 083	14-JUL-88	SO SOIL, ROW 2, SOUTH 2112 WEST LAME	0-3 in	0	TH C	22 CRABS	01 03	QBL - Blank ORIG - Original QDU - Duplicate
	M12084	14-JUL-88	SO SOIL, ROW 2, MEST, 2112 MEST LAME.	0-3 in.	0	TH C	22 CRABS	01 03	SPLT - Split QDM - Mix Check
	WH2085	14 - JUL -88	SO SOIL, BOW 2, WORTH, 2112 WEST LANE	0-3 in.	0	TH C	22 CRABS	01 03	LB - Lab
	<b>WH2</b> 086	14-JUL-88	SO SOIL, ROW 1, WEST, 2203 BRADEN.	0-3 in	0	TH C	46 GRABS	01 03	TM - TMS Analytical Services
7	MH2087	14- JUL-88	SO SOIL, ROW 1, MORTH, 2203 BRADEN	0-3 in	0	TH C	46 GRABS	å1 03	Indianapolis, IN
_	<b>M</b> 12088	14-JUL-88	SO SOIL, ROW 1. SOUTH, 2203 BRADEN	0-3 in.	0	TH C	46 GRABS	01 03	MK - IT Analytical Services
	<b>₩</b> 12089	14-JUL-88	SO SOLL ROW 2, MORTH, 2203 BRADEN	0-3 in	0	TH C	35 GRABS	<b>01 03</b>	Middlebrook Pike Knoxville, TN
	IM(2090	14-JUL-88	SO SOIL, ROW 2, WEST 2203 BRADEN	0-3 in.	a	тн с	35 GRARS	01 03	Sample Status
	<b>WIZ091</b>	14-JUL-68	SO SOIL, BON 2, SOUTH, 2203 BRADEN	0-3 in	0	TH C	35 GRABS	01 03	01 - Rush 02 - Analyze (no rush)
	M12092	14-JUL-88	SO SOLL. ROW L, WEST. 2202 BRADEN	0-3 in.	0 ORIG WH2093	TH C	49 GRABS	01 03	03 - Hold 04 - EPA Split
	WH2093	14-JUL-88	SO SOLE, ROW 1, WEST, 2202 BRADEN	9-3 in.	9 000 WH2092	TH C	49 GRABS	01 03	Analysis Request
	MH2894	14-JUL-88	SO SOIL, ROW I, MORTH, 2202 BRADEN	0-3 in	0	TH C	49 GRABS	01 03	03 - TCDD; 2,3,7,8-TCDD
	WH2095	14-JUL-88	SO SOIL, ROW I, WEST, 2202 BRADEM, EPA SPLIT	0-3 1m	0 SPLT WH2092	c	49 GRABS	64 03	04 - Other Analytical Parameters
	MH2096	15-JUL-88	SO SOIL ROW 1, SOUTH, 2202 BRADEN	0-3 in.	a	TH C	49 GRABS	01 03	
	MH2097	15-JUL-88	SO SOIL, ROW 2, MORTH, 2202 BRADEN	D-3 in	0	ти с	44 GRABS	01 03	
	WH2098	15-JUL-88	SO SOIL, BOW 2. WEST, 2202 ERADEM	0-3 in	0	TH C	44 GRABS	01 03	
	<b>48</b> 12099	15-JUL-88	SO SOIL, ROW 2, SOUTH, 2202 BRADEN	0-3 in	6	TH C	44 CRABS	01 03	
	MH2100	15-JUL-88	SO SOIL BLANK		0 QBL	TH C	NA.	0L 03	
	MH2101	14-JUL-88	LI LIGUID, HEXANE, EQUIPMENT BINSE		ORI	TH C	2 AIMSES	01 03	

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TABLE A-I NAMERIC LISTING OF ALL SAMPLES COLLECTED

	SAMPLE MIMBER	DATE Sampled	SAH TYP	P B SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE		OC PARTNER	REFERENCE LB AREAS	UNITS IN COMPOSITE	STATUS	ANALYSIS Request	
	WH2102	14 · JUL - 88	u			QBL		тн с	KA		03	
	MH2103	15 JUL-88	50	SOIL. ROW 1. WEST 618 ALTA COVE	0-3 1B	O ORIG	MH2104	ти с	44 GRABS	81	03	
	WH2104	15-JUL-88	50	SOIL, ROW 1, WEST, 618 ALTA COVE.	0-3 in	0 000	WH2103	TH C	44 GRABS	01	03	
	WH2105	15-JUL-88	50	SOIL. ROM I, WEST 618 ALTA COVE EPA SPLIT	0-3 in	O SPLT	WH2103	c	44 GRABS	04	03	TABLE KEY
	WH2106	15 JUL 88	50	SOIL. ROW 1. MORTH 618 ALTA COVE.	0-3 10	0		TH C	44 GRABS	01	03	QC - Quality Control
	WH2107	15-JUL-88	SO	SOLL, ROM I. SOUTH 618 ALTA COVE	0-3 1n	0		TH C	44 GRABS	61	<b>9</b> 3	QRI - Rinse
	WH2108	15-JUL-88	50	SOIL, ROW 2 MEST. 618 ALTA COVE	0-3 ta	0		TH C	40 CRABS	01	03	QBL - Blank ORIG - Original QDU - Duplicate
	WH2109	15-JUL-88	50	SOIL, ROW 2, MORTH, 618 ALTA COWE	0-3 in	0		TH C	40 CRABS	01	03	SPIT - Split QDM - Mix Check
	<b>44</b> 12110	15-JUL-88	50	SOIL, ROW 2 SOUTH 618 ALTA COVE	0-3 1n	0		TH C	40 CRABS	01	03	LB - Lab
	MH2111	15-JUL-88	50	SOIL, ROW 1, NORTH 620 ALTA COVE.	0 3 1a	ò		TH C	33 CRABS	01	D3	TM - TMS Analytical Services
-	WH2112	15-JUL-88	50	SOIL, ROW 1 WEST 620 ALTA COVE	0-3 1A	0		TH C	33 GRABS	01	03	Indianapolis, IN
•	WH2113	15-JUL-88	50	SOIL, ROW 1, SOUTH, 620 ALTA COWE.	0-3 in	0		ти с	33 CRABS	01	03	MK - IT Analytical Services
	MH2114	15-JUL-88	50	SOIL, ROW 2, WEST 620 ALTA COVE	0-3 10	0		тн с	34 GRABS	03	03	Middlebrook Pike Knoxville, TN
	WH2115	15-JUL-88	50	SOIL, ROW 2, MORTH, 620 ALTA COVE	D-3 an	0		тн с	34 GRABS		03	Sample Status
	UH2116	15 JUL-88	50	SOIL ROW 2 SOUTH 620 ALTA COVE.	0-3 in	0		TH C	34 GRABS	03	03	01 - Rush 02 - Analyze (no rush)
	M2117	15-JUL-88	LI	LIQUID, HEXAME, EQUIPMENT RINSE		o osi		тн с	MA	81	03	03 - Hold 04 - EPA Split
	WH2118	16: JUL-88	<b>S</b> 0	SOIL. HOURD OF DIRT AT FEMCE COMMER BETWEEN APT.PLAYGROUND 4 RB, EAST	0-3 in.	ι 5		TH C	25 GRABS	01	03	Analysis Request
	WH2119	16-JUL-88	50	SOIL MOUND OF DIRT ON EAST BANK OF ROCKY BRANCH AT MAIN STREET BRIDGE	0-3 an	3 5		TH 0	36 CHARS	01	03	03 - TCDD; 2,3,7,8-TCDD
	WH2120	16-JUL-88	50	SOIL, SOUTH, MANDOLF #2745, 1704 HILL ST	0-3 io	0		ти с	36 GRABS	DI	03	04 - Other Analytical Parameters
	WH2121	16-JNL-88	<b>S</b> 0	SOIL. WEST. HANHOLE #2745 1704 HILL ST	0-3 in	0		TH C	36 GRABS	<b>0</b> 1	03	
	WH2122	16-JUL-88	50	SOIL, EAST, MANHOLE #2745 1704 HILL ST	0-3 in	0		тн с	36 GRARS	61	03	
	WK2123	16-JUL 88	50	SOIL, ROW 1. SOUTH, 1704 HILL ROAD	0-3 in	0		TH C	31 GRABS	01	03	
	M12124	16-JUL-88	\$0	SOIL, ROW 1, EAST 1704 HILL ROAD	0-3 1a	0		TH C	31 GRABS	01	03	
	WH2125	16-JUL 88	50	SOIL, ROW 1, MORTH 1704 HILL ROAD	0-3 ın	0		TH C	31 GRABS	01	03	
	MH2126	16-JUL-88	50	SOIL ROW 2 SOUTH 1/04 HILL RUA	0-3 in	0		TH C	32 GRABS	01	03	

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TABLE A-1 NUMERIC LISTING OF ALL SAMPLES COLLECTED

	SAMPLE Number	DATE SAMPLED	SAVE FYP	P E SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE Water OC OC Parthe	REFERENCE R LB ABEAS	COMPOSITE	STATUS	E AMALYSIS S REQUEST	
	WH2127	16-JUL-B8	S0	SOIL, ROW 2, NORTH 1704 HILL ROAD	0-3 1a	0	TH C	32 GRABS	01	03	
	WH2128	16-JUL-88	50	SOIL, ROW 2. EAST, 1704 HILL WOAD	0-3 IB	0	IN C	32 GRABS	01	03	
	WH2129	16 JUL-88	LI	LIQUID, HEXANE, EQUIPMENT RINSE.		0 QR1	TH C	NA	LO	03	
	WH2130	17 - JUL-88	SE	SEDIMENT, MORTH \$1 QUAD, LAKE DUPREE	grab	-6	TH I	6 GRABS	OĪ	03	TABLE KEY
	MH2131	17-JUL-88	SE	SEDIMENT, #2 QUAD, LAKE DUPHEE.	grab	-6	TH I	6 GRABS	01	03	QC - Quality Control
	₩ <b>1</b> 2132	17- JUL-88	SE	SEDIMENT, \$3 QUAD. LAKE DUPREE	grab	-6	TH I	6 GRABS	01	03	QRI - Rinse
	WH2133	17 JUL 88	SE	SEDIMENT, SOUTH #4 QUAD LAKE DUPREE	grab	-6	TH !	6 GRABS	01	03	QBL - Blank ORIG - Original QDU - Duplicate
	MH2134	17-JUL-88	<b>S</b> 0	SOIL, PERIMETER OF OXIDATION POWDS	0-3 in	0	TH G	58 GRABS	01	03	SPLT - Split QDM - Mix Check
	MH2135	17-JUL-88	50	SOIL, AERATION BASIN PERIMETER	0-3 in	D	TH F	83 GRABS	01	03	LB - Lab
_	WK2136	17 JUL-88	u	LIQUID. HEXANE. EQUIPMENT RIKSE.		0 ONI	TH F	NA	LO	03	TM - TMS Analytical Services
_	WH2137	18 - JUL - 88	SO	SOIL. BOW I. SOUTH 1703 HILL ROAD EAST BOOKY BRANCH,	0-3 in	0	IN C	33 GRABS	01	03	Indianapolis, IN
~	MH2138	18 JUL-88	<b>S</b> 0	SOIL, BON 1, NORTH, 1703 HILL ROAD, EAST BOCKY BRANCH	0-3 in	9	TH C	33 GRABS	01	03	MK - IT Analytical Services
	MH2139	18 - JUL - 88	50	SOIL, ROW L. EAST. 1703 HILL ROAD. EAST BOOKY BRANCH	0-3 1n	0	TH C	33 GRABS	01	D3	Middlebrook Pike Knoxville, TN
	MH2140	18-JUL-88	S0	SOIL BOW 2. NORTH 1703 HILL ROAD, EAST BOOKY BRANCH	0-3 in	D	TH	34 CRABS	03	03	Sample Status
	WH2141	18 - JUL-88	50	SOIL. NOW 2, SOUTH, 1703 HILL BOAD, EAST BOOKY BRANCH	0-3 in	0	TH C	34 GRABS	03	03	01 - Rush 02 - Analyze (no rush)
	WH2142	18 · JUL - 88	<b>S</b> 0	SOIL. ROW 2, EAST, 1703 HILL ROAD. EAST ROCKY BRANCH	0-3 in.	9	TH C	34 GRABS	03	<b>C</b> 3	03 - Hold 04 - EPA Split 10 - Sample Lost in
	WH2143	18-JUL-88	50	SOIL BOW 1. MORTH, 629 BROOKNAVEN COURT EAST ROCKY BRANCH	0-3 in	0	IN C	13 GRARS	01	03	Transport
	<b>18</b> 12144	18-JUL-88	50	SOIL. BOW 1 EAST. 629 BROOKHAVEM COURT EAST ROCKY BRANCH	0-3 in	0	TH C	13 CRABS	01	03	Analysis Request
	WH2145	1B JUL 88	SØ	SOIL. ROW 2, EAST, 629 BROOKHAVEN COURT, EAST ROCKY BRANCH	0-3 tn	0	IM C	16 GRABS	03	03	03 - TCDD; 2,3,7,8-TCDD 04 - Other Analytical
	WH2146	18- JUL-88	50	SOIL ROW 1, SOUTH 629 BROOKHAVEN COURT, EAST ROCKY BRANCH	0-3 in	0	IN C	13 CRABS	01	03	Parameters
	MI2147	18 - J&L - 88	50	SOIL. ROW 2. NORTH, 629 BROOKHAVEN COURT, EAST ROCKY BRANCH	0-3 in	0	TH C	16 CRARS	83	03	
	<b>SR</b> 12148	18-JUL-80	50	SOIL, ROW 2, SOUTH, 629 BROOKHAVEN COURT, EAST ROCKY BRANCH	0-3 in	0	TH C	16 GRABS	03	03	
	WH2149	18-JUL-88	50	SOIL BOW 1, SOUTH 625 BROOKHAVEN COURT EAST BOOKY BRANCH	0-3 10	0 ORIG WH2156	TH C	26 GRABS	01	03	
	WH2150	18-JUL-88	50	SOIL, BON   NORTH 625 BROOKHAVEN COURT, EAST ROCKY BRANCH	0-3 In	0	TH C	26 CRABS	61	03	
	<b>WH2151</b>	18 JUL 00	S0	SOIL, ROW I, EAST 625 BROOKHAVEN COURT EAST ROCKY BRANCH	0-3 In	O ORIG WH2152A	TH C	26 CRABS	81	03	

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FEET SAMPLE DATE SAMP DEPTH OF ABOVE REFERENCE UNITS IN SAMPLE AMALYSIS HUMBER SAMPLED TYPE SAMPLE LOCATION DESCRIPTION TAKE HATER OC OC PARTNER LB AREAS COMPOSITE STATUS REQUEST 18-JUL-88 SO SOFE ROW I, EAST, 625 BROOKHAVEN COURT, EAST ROCKY BRANCH MIX CK A G-3 an 0 OOM MH2151 TH C 26 GRABS 01 03 18-JUL-88 SO SOIL, ROW I, EAST, 625 BROOKHAVEN COURT, EAST ROCKY BRANCH HIX CK B 0-3 in 0 DOM 1802151 TH C 26 CRABS 01 03 WH2154C SO SOIL, BOW 1, EAST 625 BROOKHAVEN COURT, EAST ROCKY BRANCH, MIX CK C 0-3 in 8 QOH WH2151 TH € 26 CRABS 01 03 SO SOIL, ROW I, EAST, 625 BROOKHAVEN COURT, EAST ROCKY BRANCH, MIX CK D 8-3 in 26 GRARS 01 0 00M MR2151 TH C 03 TABLE KEY SO SOIL, ROW I, SOUTH 625 BROOKHAVEN CT,E ROCKY BRANCH DUPLICATE RH2149 8-3 10 MH2156 TH C 26 CRARS 01 0 00U MH2149 03 QC - Quality Control MH2157 SO SOIL, ROW 1, SOUTH, 625 BROOKHAVEN COURT EAST ROCKY BRANCH 0-3 in 0 Q0U WH2156 TH C 26 CRABS 01 03 QRI - Rinse QBL - Blank 18-JUL-88 SO SOIL, ROW 1 EAST 625 BROOKHAVEN COURT EAST ROCKY BRANCH 0-3 in 0 000 MH2151 TH C 26 CRARS 01 aı ORIG - Original QDU - Duplicate SPLT - Split MH2159 18-JUL-88 SO SOIL, ROW 2, MORTH, 625 BROOKHAVEN COURT, EAST BOCKY BRANCH 0-3 to TH C 25 CRABS 03 03 QDM - Mix Check WH2160 SO SOIL, BON 2, EAST, 625 BROOKHAVEN COURT EAST ROCKY BRANCH TH C 25 GRABS 83 6-3 an 03 LB - Lab TH - TMS Analytical WH2161 SO SOIL, BOW 2, SOUTH, 625 BROOKHAVEN COURT, EAST BOCKY BRANCH 0-3 in TH C 25 CRABS 03 03 Services Indianapolis, IN SO SOIL, ROW 1, NORTH, 621 BROOKHAVEN COURT EAST ROCKY BRANCH 0-3 in TH C 14 GRABS 01 WH2162 03 MK - IT Analytical MH2163 SO SOIL, ROW 1, EAST, 621 BROOKHAVEN COURT, EAST ROCKY BRANCH TH C (4 GRABS 0) 0.3.16 . 03 Services Middlebrook Pike WH2164 18-JUL-88 SO SOIL, ROW 1, SOUTH, 621 BROOKHAVEN COURT, EAST BOCKY BRANCH n-3 to THC 9 CRABS 01 03 Knoxville, TN Sample Status WR2165 18-JUL-88 SO SOIL, ROW 2, EAST, 621 BROOKHAVEN COURT, EAST ROCKY BRANCH 0-3 1R TH C 9 GIABS 03 03 01 - Rush MH2166 18-JUL-88 SO SOIL FIELD BLANK 0 GBL TH C 03 02 - Analyze (no rush) 03 - Hold .18-JUL-88 SO SOIL, BOW 2, NORTH, 621 BROOKHAVEN COURT, EAST ROCKY BRANCH 9 CRABS 04 - EPA Split 0-3 to A TM C 03 03 LO - Sample Lost in Transport I#12168 18-JUL-88 SO SOIL, BOW 2, SOUTH, 621 BROOKHAVEN COURT, EAST ROCKY BRANCH 0-3 n 0 TH C 9 CRABS 03 03 Analysis Request MH2169 18-JUL-88 50 SOIL, ROW I EAST, 617 BROOKHAVEN COURT EAST ROCKY BRANCH 0-3 in TH C 14 GRABS 01 D3 - TCDD: MH2170 18-JUL-88 SO SOIL, ROW 1, MORTH, 617 BROOKHAVEN COURT, EAST ROCKY BRANCH 0-3 in TH C 14 GRABS 01 2,3,7,8-TCPP 0.3 04 - Other Anal Parameters. WH2171 18-JUL-88 LT LTOUTD REXAME, EQUIPMENT BINSE 0 OF TH C 01 N3 貸2172 18-JUL-88 LI LIQUID HEXANE, TRIP BLANK 10 OPI TH nα HI21/3 SO SOIL, ROW 1, SOUTH 617 BROOKHAVEN COURT 0-3 10 TH C 14 CRABS 01 WI2174 19-JUL-88 SO SOIL ROW 2, WORTH 617 BROOKHAVEN COURT 0-3 in TH C 14 GRABS WH2175 19 JUL-88 SO SOIL ROW 2 EAST 617 BROOKHAYEN COURT 0-3 in TH C 14 GRABS 03 19-JUL-88 SO SOIL BOW 2, SOUTH 617 BROOKHAVEN COURT 0-3 10 TH C 14 GRASS 03 03

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TABLE A-I NUMERIC LISTING OF ALL SAMPLES COLLECTED

SAMPLE Manben	DATE Sampled		DEPTH OF TAKE	FEET ABOVE Mater QC QC PARTMER	REFERENCE LB AREAS	UNITS IN COMPOSITE	SAMPLE AN Status re	
WH2177	19-JUL-88		0-3 in	0	TH C	14 GRABS	01 0	1
WH2178	19-JUL-88	SO SOIL, ROW I, SOUTH 613 BROOKHAVEN COURT	0-3 in	0 .	TH C	14 CRABS	01 03	1
WH2179	19-JUL-88	SO SOIL, BOW 1, EAST, 613 BROOKHAVEN COURT	0 1 in	0	ти с	14 GRABS	01 03	1
WH2180	19-JUL-88	SO SOIL, NOW 2, SOUTH. 613 BROOKHAVEN COURT	0-3 in	0	ти с	14 GRABS	03 03	TABLE KEY
WK2181	19-JUL-88	SO SO2L, ROW 2, EAST, 613 BROOKHAVEN COURT	0-3 in	0	TM	14 GRABS	03 0	QC - Quality Control
WH2182	19-JUL-88	SO SOIL, BOW 2, MORTH, 613 BROOKHAVERM COURT	0-3 in	0	ти с	14 GRABS	03 03	QRI - Rinse QBL - Blank
WH2183	19-JUL-88	SO SOIL, ROW I, EAST, 609 BROOKHAYEN COURT	0-3 in	0	ти с	14 CRARS	01 03	
WH2184	19-101-88	SO SOIL, NOW I, NORTH, 609 BROOKHAVEN COURT	0-3 1n	0	TH C	14 CRARS	ô1 03	SPLT - Split QDM - Mix Check
WK2185	19-JUL-88	SO SOIL, BOW I. SOUTH, 609 BROOKHAVEN COURT	0-3 in	0	TH C	14 GRARS	01 0:	LB - Lab.
WH2186	19-JUL-88	SO SOLL, BOW 2, NORTH, 609 BROOKHAVEN COURT	0-3 ia	9	тн с	13 CRABS	03 03	Services
WH2187	19-JUL-88	SO SOIL, ROW 2. SOUTH. 609 BROOKHAVEN COURT	0-3 in	0	TH C	13 GRABS	03 03	Indianapolis, IN  MK - IT Analytical
WH2188	19-JUL-88	SO SOIL, BOW 2, EAST, 609 BROOKHAVEN COURT	0-3 in	0	ти с	13 GRABS	03 03	
MH2189	19-JUL-88	SO SOIL, BOW I, EAST, 605 BROOKHAVEN COURT	0-3 in	0	ти с	14 GRABS	01 03	Knoxville, TN
MH2190	19 JUL-88	SO SOIL, ROW &, MORTH, 605 BROOKHAVEN COURT	0-3 in	6 ORIG MH2191	TH C	14 CRABS	01 03	Sample Status Ol - Rush
<b>WH2</b> 191	19-JUL-88	SO SOIL, ROW 1, MORTH, 605 BROOKHAVEN COURT	0-3 in	0 GDU WH2190	TH C	14 CRABS	01 03	
WH2192	19-JUL-88	SO SOIL, ROW 1, MORTH, 605 BROOKHAVEN COURT, EPA SPLIT	0-3 in	0 SPLT WH2190	c	14 GRABS	04 03	04 - Pht Colub
WH2193	19-JUL-88	SO SOTE, ROW 1, SOUTH 605 BROOKHAVEN COURT	0-3 in	D	TH C	14 GRABS	01 03	
I#12194	19- JUL - 88	SO SOIL, ROW 2, NONTH, 605 BROOKHAVEN COURT	0-3 sn	0	TH C	14 CRABS	03 00	03 - TCDD; 2,3,7,8-TCDD 04 - Other Analytical
WH2195	19 · JUL - 88	SO SOIL. ROW 2. EAST, 605 BROOKHAVEN COURT	0-3 in	0	TH C	14 CRABS	03 0	n
WH2196	19 - JUL - 88	50 SOIL, BOW 2, SOUTH, 605 BROOKHAVEN COURT	0-3 in.	0	TM C	14 GRABS	03 0	3
WH2197	19-JUL-88	SO SOIL, ROW 1, EAST, 501 BROOKHAVEN COURT	0-3 an	0	TH C	14 CRABS	01 03	3
WH2198	19 JUL 88	SO SOIL. ROW 1, SOUTH 601 BROOKHAVEN COURT	0-3 in	g	TH C	14 GRABS	01 03	1
WK2199	19- JUL-68	SO SOIL, ROW 1, MORTH 601 BROOKHAVEN COURT	0-3 1n	g	TH C	14 GEARS	01 0	3
MH2200	19-JVL-88	SO SOIL, ROW 2, EAST 601 BROOKHAVEN COURT	0 3 10	0	TH C	12 GRASS	03 0	1
WH2201	19-JUL-88	SO SOIL BOW 2 MORTH 601 BROOKHAVEN COURT	0-3 nr	0	TH C	12 GRABS	03 0	3

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TABLE A-1 NUMERIC LISTING OF ALL SAMPLES COLLECTED

	SAMPLE Number	DATE Sampled	SAMP TYPE SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE WATER OC OC PARTNER	REFERENCE LB AREAS	UNITS IN COMPOSITE	SAMPLE ANALYSI STATUS MEGUEST	s
	WH2202	19-JUL-88	SO SOIL, ROW 2, SOUTH 601 BROOKMAYEDN ROAD	0-3 in	0	TH C	12 GRABS	03 03	-
	HH2203	19- JVL -88	LI LIGUID, HEXAME EQUIPMENT RINSE		180 0	TH C	KA	01 03	
	MH2204	19-JUL-88	SO SOIL BLANK.		O OBL	TH C	KA	01 03	
	WH2205	19- JUL-88	LI LIQUID, HEXAME, TRIP BLANK		0 OBL	тн с	Na	<b>01 0</b> 3	TABLE KEY
	MH2206	21 - JUL-88	SE SLUDGE, MEST END OF NORTH OXIDATION POND. TOP SEDIMENT/SLUDGE	9-4 In	-3 5	TH G1	4 GRASS	01 03	QC - Quality Control
	W12206P	21-JUL-88	SE SLUDGE, MEST END OF MORTH OXIONSION POND, TOP SEDIMENT/SLUDGE	0-4 in	-3 5	HK G1	4 CRABS	02 04	QRI - Rinse
	WH2207	21 · JUL-88	CO SLUDGE MEST END OF MORTH OXIDATION POND, INTERFACE	0-3 in	-5	TH G1	4 CORINGS	01 03	QBL - Blank ORIG - Original QDU - Duplicate
	WH2208	21-JUL-88	SE SLUDGE, EAST END OF NORTH OXIDATEON POND. TOP SEDIMENT/SLUDGE	0-4 in	-3 5	TH G1	4 CRABS	01 03	SPLT - Split QDM - Mix Check
	MH220AP	21 - JUL-88	SE SLUDGE EAST END OF NORTH OXEDNTEON POND, TOP SEDIMENT/SLUDGE	0·4 in	-3 \$	HK G1	4 GRABS	02 04	LB - Lab
>	₩t2209	21 - JUL-88	CO SLUDGE.EASY MALF OF NORTH OXIONTEON POND. INTERFACE	0-3 in	-5 ORIG WH2210	TH G1	4 CORINGS	01 03	TH - TMS Analytical Services
1	<b>単位2210</b>	21-JUL-88	CO SLUDGE EAST HALF OF MORTH OXIGATION POND INTERFACE	0-3 an	-5 <b>COU 18</b> 12209	TH G)	4 CORTINGS	01 03	Indianapolis, IN
	WH221 [	21-JVL-88	OO SLUDGE.EAST HALF OF NORTH OXIDATION POND, INTERFACE, EPA SPLIT	0-3 in	-5 SPLT MH2209	G1	4 CORINGS	04 03	MK - IT Analytical Services
	₩2212	21 - JUL - 88	CO SLUDGE WEST END OF SOUTH OXIGNTEON POND. INTERFACE	0-3 ın	-5	TH G2	4 CORTINGS	01 03	Middlebrook Pike Knoxville, TN
	WH2213	21 JUL-88	SE SLUDGE, WEST END OF SOUTH OXIGNTEON POND TOP SEDIMENT/SLUDGE	0-4 in	-3 5	TH G2	4 CRABS	01 03	Sample Status
	SH1221 3P	21-JUL-88	SE SLUDGE WEST END OF SOUTH OXIDATEON POND, TOP SEDIMENT/SLUDGE	0-4 in	-3 5	HK G2	4 CRABS	02 04	01 - Rush 02 - Analyze (no rush) 03 - Hold
	WH2214	21-JUL-88	CO SLUBGE, EAST END OF SOUTH OXIDATION POND INTERFACE	0-3 in	-5	TM G2	4 CORINGS	01 03	04 - EPA Split
	<b>@1</b> 2215	21-JUL-88	SE SLUDGE, GAST END OF SOUTH OXIDATION POND TOP SEDIMENT/SLUDGE	0-4 1 <b>n</b>	-3.5	TH G2	4 GRABS	01 03	Analysis Request
	WH2215P	21-JUL-88	SE SLUDGE. EAST END OF SOUTH OXIDATION FOND TOP SEDIMENT/SLUDGE	0-4 in	-3 5	HK G2	4 GRABS	02 04	03 - TCDD; 2,3,7,8-TCDD 04 - Other Analyticai
	W12220	22-JUL-88	SE SLUDGE MORTH QUADRANT OF AERATION BASIN TOP SEDIMENT/SLUDGE	0-2 in	-12	TH F	6 GRABS	01 03	Parameters
	WH2220P	22 JUL-88	SE SLUDGE. MORTH GUADRANT OF ABRATION BASIN TOP SEDIMENT/SLUDGE	0-2 in	-12	HK F	6 GRABS	02 04	
	WH2221	22-JUL-88	SE SLUDGE NORTH-EAST QUADRANT AERATION BASIN. TOP SEDIMENT/SLUDGE	9-2 in	-12	TH F	6 GRABS	01 03	
	₩12221P	22-JUL-88	SE SLUDGE HORTH-EAST QUADRANT AERATION BASIN, TOP SEDIMENT/SLUDGE	0·2 in	-12	HK F	6 GRABS	02 04	
	WK2222	22-JVL-88	SE SLUDGE SOUTH CHADRANT AFRATION BASIN, TOP SEDIMENT/SLUDGE	B-2 LN	-12 ORIG WH2226	TH F	6 GRABS	01 03	
	1412222P	22-JUL-88	SE SLUDGE, SOUTH QUADRANT ARRATION BASIN, TOP SEDIMENT/SLUDGE	0-2 IN	-12 ORIG MH2226	HK F	6 GRABS	02 04	
	WH2223	22-JUL-88	SE SLUDGE, S DUADRANT AERATION BASIN, TOP SEDIMENT/SLUDGE, EPA SPLIT	0 2 1n	-12 SPLT 4H2222	F	6 CRABS	04 03	

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SAMPLE Muniber	DATE Sampled		DEPIH OF TAKE	FEET Above Hater QC QC Parther	REFERENCE LB AREAS		STATUS	AMALYSIS REQUEST	
WH2224	22- JUL-88		0-2 in	-12	TH F	6 GRABS		03	
MH2224P	22- JUL-88	SE SLUDGE, SOUTH-MEST QUADRANT AERATION BASIN, TOP SEDIMENT/SLUDGE	0-2 In	-12	MK F	6 GRABS	02	04	
<b>UH</b> 2226	22-JVL-88	SE SLUDGE, SOUTH QUADRANT AERATION BASIN, TOP SEDIMENT/SLUDGE	0-2 in	-12 QDU WH2222	TH F	6 GRABS	01	03	
MH2227	22 JVL 88	CO SLUDGE. NORTH QUADRANT AGRATION FOND, INTERFACE	0-1 IN	-15	IN E	6 CORINGS	61	03	TABLE KEY
MH2228	22-JUL-88	CO SLUDGE, NORTH-EAST QUADRANT, AERATION BASIN, INTERFACE	0-1 ID	-15	TH F	6 CORINGS	01	03	QC - Quality Control
MH2229	22- JUL-88	CO SLUDGE. SOUTH QUADRANT AFRATION BASIN INTERFACE	0-1 in	-15 ORIG WH2230	TM F	6 CORINGS	01	03	QR1 - Rinse QBL - Blank
M12230	22-JUL-88	CO SLUDGE SOUTH QUADRANT AFRATION BASIN. INTERFACE	0-1 in	-15 QDU WH2229	TH F	6 CORINGS	01	03	ORIG - Original QDU - Duplicate
¥H2231	22-JUL-88	CO SLUDGE, SOUTH QUADRANT AERATION BASIN, INTERFACE EPA SPLIT	0-1 1N	-15 SPLT VH2229	F	6 CORINGS	04	03	SPLT - Split QDM - Mix Check
MH2232	22-JUL-88	CO SLUDGE, SOUTH-WEST QUADRANT ARRATION BASIN, INTERFACE	0-1 1n	-15	TH F	6 CORINGS	01	03	LB - Lab
WH2233	23-JUL-88	SO SOIL. EAST, 1000-1250 FT, E. ROCKY BR RESAMPLE, ROW 1, EXCEPT DIRT PILE	0-3 in	8	TM C	43 CRABS	10	03	TM - TMS Analytical Services
MH2234	23 · JUL · 88	SO SOIL, EAST, 1000-BOAD, & ROCKY BR RESAMPLE, BOW 1, EXCEPT DIRT PILE	0-3 in	0	TM C	35 GRABS	01	03	Indianapolis, IN
HH2235	23-JUL-88	SO SOIL, EAST, BOAD-1250 FEET, EAST BOCKY BRANCH RESAMPLE ROW 1	0-3 in	0	TH C	8 CRABS	01	03	MK - IT Analytical Services Middlebrook Pike
MH2236	23-JUL-68	SO SOIL, WEST, MANHOLE MUMBER 2735 AT 617 GARLEY	0-3 ın	0	TH C	35 CHARS	01	03	Knoxville, TN
<b>III(22</b> 37	23-JUL-88	SO SOIL. HORTH. MANHOLE MUMBER 2735 AT 617 CAKLEY	0-3 tn	0	TH C	35 CRABS	01	03	Sample Status
MH2238	23- JUL - 88	SO SOIL, SOUTH, MARHOLE MUMBER 2735 AT 617 OAKLEY	0-3 IN	0	TH C	35 GRABS	81	03	01 - Rush 02 - Analyze (no rush) 01 - Hold
MH2239	23-JUL-88	SO SOIL, SOUTH, MANHOLE MUMBER 2735 AT 617 OAKLEY, EPA SPLIT	0-3 (a	0 SPLT WH2238	c	35 GRABS	04	03	04 - EPA Split
MH2240	23-JUL-88	LI LIQUID, HEXAME EQUIPMENT RINSE		o GRI	TH C	2 DINSES	01	03	Analysis Request
MH2240V	23-JUL-88	LI LIQUID, HEXANE, EQUIPMENT RINSE VERIFICATION ANALYSIS OF WH2240		0 GRI	TH C	2 RINSES	01	03	03 - TCDD; 2,3,7,8-TCDD 04 - Other Analytical
<b>MH2241</b>	23 JUL-88	SO - SOIL 2510-2940 FT - E - ROCKY BRANCH . RESAMPLE . 6 IN LEVEL, RICHT BANK	0-3 ta	5	TH A	30 GRABS	01	03	Parameters
I#12242	23-JUL-88	SO SOIL, VACANT LOT AT PARKING AREA MXT TO GATE BETWEEN 3010 & 3018 HINES	0-3 in	0	TH D	MA	01	03	
<b>W12243</b>	23-JUL-88	50 SOIL FIELD BEHIND CHURCH ON BRADEN STREET	0-3 1n	0	TH D	NA	01	03	
WH2244	25 - JUL - 88	SO SOIL, 604 BROOKHAVEN COURT, MIDDLE OF FENCE BETWEEN FENCE & POOL	0-3 in ·	0	TH D	HA	01	03	
WH2245	25 JUL 88	SO SOIL 604 CHERYL HIDDLE OF FENCE ACROSS BACKYARD	0 3 1 <b>n</b>	0	TH D	KA	01	03	
WH2246	25 JUL-88	SO SOIL 2200 BRADEN 4" HORTH SIDE OF TELEPHONE POLE ON CORNER	0-3 in	0	TH D	NA	01	03	
MH2247	25-JIAL-88	SO SOIL 2011 BRADEN, BETWEEN PLANTS & HOUSE 4 FT ON WEST SIDE	0.1 in	5	TK n	NA	01	n3	

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TABLE A-1 NUMERIC LISTING OF ALL SAMPLES COLLECTED

SAMPLE Number	DATE SAMPLEO	TYPE SAMPLE LOCATION DESCRIPTION	TAKE	FEET Above Mater QC — QC Partne	REFERENCE I L8 ANEAS	UNITS IN COMPOSITE	SAMPLE ANALYSIS STATUS REQUEST	
WK2248	25 JUL-88	SO SOIL, 2113 BRADEN, BETWEEN PLANTS & HOUSE 4 FT ON MEST SIDE EPA SPLIT (	0-3 iu	0 SPLT WH2247	D	NA.	04 03	
1412249	24-JUL-88	SO SOIL, ROW 3. NORTH, 0-250 FT MEST ROCKY BRANCH	0-3 IU	0	TH C	SO CRABS	01 03	
WH2250	24-JVL-88	SO SOIL ROW 3, WEST, 0-250 FT, WEST ROCKY BRANCH	0-3 LN	0	TH C	SO GRABS	01 03	
IM12251	24-JUL-88	SO SOIL, BOM 3, HEST 0 250 FT. MEST BOCKY BRANCH, EPA SPLIT	D-3 10	O SPLT WH2250	c	50 GRABS	04 93	TABLE KEY
MH2252	24-JUL-88	SO SOIL, BOM 3, SOUTH 0-250 FT WEST BOCKY BRANCH	0-3 an	8	TH C	50 CRABS	01 03	QC - Quality Control
MH2253	24-JUL-88	SO SOIL ROW 4 MEST 0-250 FT. MEST BOCKY BRANCH	D-3 in	0	TH C	SO GRABS	03 03	QRI - Rinse
WH2254	24- JUL-88	50 SOLL BOW 4. MORTH 0-250 FT WEST BOCKY BRANCH	D-3 1A	D	ти с	50 GRABS	03 03	QBL - Blank ORIG - Original ODU - Duplicate
WH2255	24-JUL-88	SO SOIL, ROW 4, SOUTH, U-250 FT. WEST ROCKY BRANCH	9-3 in	0	TH C	50 GRABS	03 03	SPIT - Split QDM - Mix Check
WH2256	24 - JUL-88	LI LIQUID. HEXAME EQUIPMENT RINSE		0.081	TH C	2 RINSES	01 03	LB < Lab
WH2257	24 - JUL-88	SO SOIL, BOW 3, MORTH 250-500 FT, MEST ROCKY BRANCH.	D-3 1A	0	TH C	50 GRABS	01 03	TM - TMS Analytica) Services
- MH2258	24-JUL-88	SO SOIL, BOW 3, SOUTH 250-500 FT, MEST ROCKY BRANCH	)-3 in	0	TH C	50 CRABS	01 03	Indianapolis, IN
M12259	25 JUL 88	SO SDIL, NOW 3, WEST, 250-500 FT. MEST ROCKY BRANCH	)-3 in	0	TH C	50 GRABS	01 03	MK - IT Analytical Services
WH2260	25 - JUL - 88	SO SOIL, BOW 4. MORTH 250-500 FT. MEST ROCKY BRANCH	)-) 1A	0	TM C	50 CRABS	01 03	Middlebrook Pike Knoxville, TN
IH12261	25 · JUL - 88	50 SOIL, BOM 4, SOUTH, 250-500 FT, MEST ROCKY BRANCH	)-3 in	0	TH C	50 CRABS	01 03	Sample Status
HH2262	25 · JUL · 88	SO SOIL BOW 4. MEST, 250-500 FT MEST BOOKY BRANCH	0-3 in	0	TH C	50 GRABS	01 03	01 - Rush 02 - Analyze (no rush)
MH2263	25 · JUL ·88	SO SOIL, ROW 3, WEST, 500-750 FT. MEST BOCKY BRANCH	D 3 in.	0	TH C	48 CRABS	01 03	03 - Hold 04 - EPA Split
WH2264	25- JUL-88	SO SOIL ROW 3, WORTH SOO 750 FT MEST ROCKY BRANCH	D-3 Iu	0	TH C	48 GRABS	01 03	Analysis Request
WH2265	25 · JUL · 88	SO SOIL, ROW J. WEST 500-750 FT. WEST ROCKY BRANCH EPA SPLIT	0-3 tn	0 SPLT MH2263	c	40 CRABS	04 03	03 - TCDD; 2,3,7,8-TCDD
WH2266	24 · JUL · 88	SO SOIL, BLANK		O GBL	TH C	MA	01 03	04 - Other Analytical Parameters
WH2267	25- JUL 68	SO SOFL BOW 1 SOUTH 500-750 FT MEST ROCKY BRANCH	D-3 in	0	TH C	48 GRABS	01 03	
MH2268	25 · JUL · 88	SO SOIL BOW 4, MORTH 500-750 FT, MEST ROCKY BRANCH	D-3 in	0	TH C	44 GRABS	02 03	
4812269	25-JUL-88	SO SOIL, ROM 4, MEST 500-750 FT MEST ROCKY BRANCH	D-3 IN	0	TH C	44 CRABS	03 03	
M2270	25 JUL-88	SO SOIL ROW 4, SOUTH SOG-750 FT, MEST BOCKY BRANCH	0-3 in	0	TH C	44 GRABS	03 03	
WH2271	25 JUL-88	SO SOIL ROM 3 WEST 750 930 FT WEST ROCKY BRANCH	0 3 jn	0	TH C	30 GRABS	01 03	
WH2272	25 JUL-88	SO SOIL ROW 3 HORTH 750 930 FT WEST BOCKY BRANCH	0 3 in	8	TH C	30 GRABS	D1 03	

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#### TABLE A-L MUMERIC LISTING OF ALL SAMPLES COLLECTED

SAMPLE Manber	DATE Sampled	SAMP TYPE SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEFT ABOVE NATER GC GC PARTNE	REFERENCE O LO AREAS	UNITS IN COMPOSITE	SAMPLE AMALY STATUS REQUE	ir
WH2273	25-JUL-88	SO SOIL ROW 3 SOUTH, 750-930 ET WEST ROCKY BRANCH	aı C-0	0	TH C	30 GRABS	01 63	
MH2274	25-JUL-88	SO SOIL ROW 4. MORTH 750-930 FT WEST BOCKY BRANCH	0-3 IV	0	TH C	33 CRABS	03 03	
·MH2275	25 - JUL-88	SO SOIL, ROW 4, SOUTH, 750-930 FT. WEST BOCKY BRANCH	0-3 in	D	TH C	33 CRABS	03 03	
WH2276	25 JUL-88	SO SOIL, ROW 4, MEST, 750-930 FT, MEST ROCKY BRANCH	0-3 in	6	TH C	33 GRABS	03 03	TABLE REY
MH2277	25 JUL-89	SO SOIL ROW 3. NORTH 2112 WEST LAME.	0-3 in	0	TH C	32 CRABS	01 03	OC - Quality Control
MH2278	25-JUL-88	SO SOIL. ROW 1. SOUTH. 2112 WEST LAME,	0-3 in		TH C	32 GRABS	01 03	QRI - Rinse
MHZ279	25 - JUL - 88	SO SOIL. BOW J. SOUTH, 2112 WEST LANG. EPA SPLIT	0-3 in	0 SPLT WH2278	С	32 CRABS	04 03	QBL - Blank ORIG - Original QDU - Duplicate
WH2280	25-JUL-80	LI LIQUID HEXARE, EQUIPMENT RINSE		D ORI	TH C	2 RINSES	01 63	SPLT - Split QDM - Mix Check
MH2281	25-JUL-89	LI LIQUID. HEXAME TRIP BLANK.		0 QBL	TH C	NA.	01 03	I.B - I.ab
WH2282	25-JUL-88	SO SOIL. ROW 3 WEST 2112 MEST LANE.	0-3 in.	. 0	TH C	32 GRABS	01 03	TM - TMS Analytical Services
<b>M1228</b> 3	25 JUL-88	SO SOIL. ROW 4. MORTH. 2112 MEST LAME.	0-3 in	0	TH C	33 GRARS	03 03	Indianapolis, IN
M12284	26 · JUL-88	SO SOIL ROW 4. SOUTH 2112 MEST LAME, MEST ROCKY BRANCH	0-3 IN.	0	TH C	33 GRABS	01 03	MK - IT Analytical Services
<b>M12285</b>	26 - JUL - 88	SO SOIL ROW 4. MEST. 2112 WEST LAME. WEST ROCKY BRANCH	0-3 in	0	TH C	33 GRABS	03 03	Middlebrook Pike Knoxville, TN
WH2286	26 - JUL - 88	SO SOIL, ROW 3, SOUTH, 2203 BRADEN	6-3 in	0	ти с	27 GRARS	01 03	Sample Status
WH2287	26 - JUL - 88	SO SOIL, ROW 3, MORTH, 2203 BRADEN	0-3 IN	0	TM C	27 GRABS	01 03	01 - Rush 02 - Analyze (no rush)
WH12288	26-JUL-88	SO SOIL. ROW 3, MORTH. 2203 BRADEN. EPA SPLIT.	0-3 in	O SPLT WH2287	c	27 CRABS	04 03	03 - Hold 04 - EPA Split
WH2289	26 - JUL-88	SO SOIL. ROW 3. WEST, 2203 BRADEN	0-3 in	0	TH C	27 GRABS	D1 03	Analysis Request
M2290	26 JUL-08	SO SOIL, ROW 4, MEST 2203 BRADEN	0-3 an	0	TH C	24 CRABS	01 03	03 - TCDD; 2,3,7,8-TCDD
MR2291	26 - JUL - 88	SO SOIL BOW 4. SOUTH. 2203 BRADEM	0-3 1n	Ð	TH C	24 GRABS	01 83	04 - Other Analytical Parameters
M12292	26-JUL-88	SO SOIL, ROW 4. MORTH, 2203 BRADEN	0-3 in	0	TH C	24 GRABS	01 03	
<b>UH2293</b>	26-JUL-88	SO SOIL, ROW J. SOUTH 2202 BRADEN	0-3 in	0	TH C	36 GRABS	01 03	
MH2294	26- JUL-88	SO SOIL. ROW J. WEST. 2202 BRADEN	0-3 ln.	0	TH C	36 CRABS	01 03	
<b>I41</b> 2295	26 JUL-88	SO SOIL, ROW J. NORTH, 2202 BRADEN	0-3 in	0	TH C	36 GRABS	<b>01</b> D3	
MH2296	26 JUL-88	SO SOIL ROW 4 SOUTH 2202 BRADEN	0-3 in	0	TH C	32 CRABS	03 03	
MH2297	26 - JUL - 88	SO SOIL, ROW 4, WEST 2202 BRADEN	0-3 in	0	TH C	32 GRABS	03 03	

SAMPLE Number	DATE Sampled		DEPTH OF TAKE	FEET ABOVE HATER OC OC PARTNE		UNITS IN COMPOSITE	SAMPLE AMALYSIS STATUS REQUEST	
IH2298	26 - JUL - 88		0-3 in	0	TH C	32 GRABS	03 03	
MH2299	26- JUL-88	SO SOIL, BON 3, MORTH, 618 ALTA COVE	0-3 m.	0	тн с	35 GRARS	03 03	
MH2300	26-JUL-88	SO SOIL, BON 3, SOUTH, 618 ALTH COME.	C-3 1n	0	TH C	35 CRABS	03 03	
MH2301	26- JUL-88	SO SOLL. BON 3, WEST, 618 ALTA COVIE	0-3 in	0	TH C	35 GRABS	03 03	TABLE KEY
MH2302	26-JUL-88	SO SOEL, BON 4, WEST, 618 ALTA COVIE.	0-3 in	0	TH C	35 GRABS	03 03	QC - Quality Control
M12303	26-JUL-88	SO SOLL, BON 4, MORTH, 618 ALTA COME	0-3 in.	0	TH C	35 GRABS	03 03	QRI - Rinse OBL - Blank
M12304	26 JUL-88	SO SOLL, BOW 4, SOUTH 618 ALTA COVE.	0-3 in	0	TH C	35 GRABS	03 03	ORIG - Original ODU - Duplicate
WH2305	26 - JUL - B8	SO SOIL, ROW 3, MORTH, 1704 HILL ROAD	0-3 in	9	TM C	28 GRABS	01 03	SPLT - Split QDM - Hix Check
WH2306	26 - JUL -88	50 SOLL, BON 3, SOUTH 1704 HILL ROAD	0-3 1n	9	TH C	28 GRABS	01 03	1.8 - Lab
<b>WH2307</b>	26-JUL-88	SO SOIL, BON 3. EAST 1704 HILL ROAD	0-3 in	0	TH C	28 GRABS	01 03	TM - TMS Analytical Services
WH2308	26-JUL-88	SO SOIL. BOW 4 EAST, 1704 HILL ROAD.	0-3 in.	0	TH C	28 CRARS	01 03	Indianapolis, IN
<b>WN2</b> 309	26 JUL 88	SO SOIL, NOW 4, MORTH, 1704 HILL BOAD.	0-3 in.	0	TH C	28 CRABS	01 03	MK - IT Analytical Services Middlebrook Pike
WH2310	26 - JUL - 68	SO SOIL, BON 4, SOUTH 1784 HILL ROAD	0-3 in	0	TM C	28 GRABS	01 03	Knoxville, TN
WH2311	26- JUL-88	SO SOIL, WEST MARKERS, SOUTH OF DITCH, MANHOLE #2745, 1704 HILL BOAD	0-3 in	0	TH C	25 GRABS	01 03	Sample Status
M12312	26- JUL-88	SO SOIL, EAST MARKERS, SOUTH OF DITCH, MANHOLE #2745, 1704 HILL ROAD	0-3 1A	0	TH C	25 GRABS	01 03	01 - Rush 02 - Analyze (no rush) 03 - Hold
MH2313	26-JUL 88	SO SOIL, NORTH MARKERS SOUTH OF DITCH, MANHOLE \$2745, 1704 HILL ROAD	0-3 ln	0	TH C	28 CRARS	01 03	04 - EPA Split
M12314	26- JUL-88	SO SOIL, SOUTH MARKER, WORTH OF DITCH, MARHOLE \$2745, 1704 HILL ROAD	0-3 ın	O ORIG MH2316	ти с	40 CRABS	01 03	Analysis Request
<b>UH2</b> 315	26 - JUL-88	SO SOIL, SOUTH MARKER, WORTH OF DITCH, MANHOLE #2745,1704 HILL, EPA SPLIT	0-3 LA	0 SPLT MH2314	¢	40 CRABS	04 03	03 - TCDD; 2,3,7,8-TCDD 04 - Other Analytical
<b>4412</b> 316	26-JUL-88	SO SOIL SOUTH MARKER, WORTH OF DITCH, MANHOLE #2745, 1704 HILL ROAD	0-3 LA	0 QDU MH2314	TH C	40 GRABS	01 03	Parameters
WH2317	26-JUL-88	SO SOIL, EAST MARKERS, NORTH OF DITCH, MANHOLE #2745. 1704 HILL ROAD	0-3 in	0	тн с	40 GRABS	01 03	
<b>WH2</b> 318	26-JUL-88	SO SOIL, WEST MARKERS MORTH OF DITCH, MARHOLE #2745 1704 HILL ROAD	0-3 1h	0	TH C	40 CRABS	01 03	
WH2319	26 · JUL · 88	LI LIQUID HEXANE EQUIPMENT DINSE.		0 ORI	TH C	MA	D1 D3	
<b>MR2</b> 320	26-JUL-88	LI LIQUID. HEXANE TRIP BLANK		0 QBL	TM C	MA	01 03	
HH2321	10 AUG-88	SO SOIL, ROW 1. WEST 1704 HILL ROAD. REVISED EAST ROCKY BRANCH	0-3 In	D ORIG WH2324	TM C	21 GRABS	01 03	
WH2322	10-AUG-88	SO SOIL, ROW 1, SOUTH 1704 HILL ROAD, REVISED EAST ROCKY BRANCH	0-3 in	0	TH C	21 GRABS	01 03	

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TABLE A-1 NUMERIC LISTING OF ALL SAMPLES COLLECTED

	SAMPLE Munder	DATE Sampled	SAM	P E SAMPLE LOCATION DESCRIPTION	DEPTH OF AG	EET HOVE HTER OC	OC PARTHER	REFERENCE LB AREAS	UNITS IN COMPOSITE	STATUS	ANALYSIS REQUEST	
	WH2323	10-AUG-88	SO	SOIL ROM 1. WEST 1704 HILL BOAD, REVISED EPA SPLIT	0-3 in	0 SPL1	WH2321	c	21 CRABS	<b>D4</b>	03	
	MH2324	10-AUG-88	50	SOIL ROW E. MEST 1704 HILL ROAD REVISED EAST ROCKY BRANCH	0-3 1n	1 000	WH2321	TH C	21 GRABS	D1	03	
	MH2325	10-AUG-88	SO	SOIE. BOM I MORTH. 1704 HELL ROAD, REVISED, EAST ROCKY BRANCH	0-3 in.	ũ		TH C	21 GRARS	01	03	
	WK2326	10-AUG-88	50	SOIL, ROW 2, WEST, 1704 HILL BOAD, REVISED, EAST BOCKY BRANCH	0-3 1m	0		TH C	21 CRABS	01	03	TABLE KEY
	MR2327	10-AUG-88	50	SOIL, ROW 2, MORTH 1704 HILL BROAD, REVISED, EAST BOCKY BRANCH	0-3 in.	0		TH C	21 CRABS	01	03	QC - Quality Control
	WH2328	10-AUG-88	<b>\$</b> 0	SOIL, ROW 2. SOUTH, 1704 HILL BOAD, REVISED EAST ROCKY BRANCH	0-3 in	0		ти с	21 CRABS	01	03	QRI - Rinse OBL - Blank
	WH2329	10-AUG-88	S0	SOIL SOUTH, 1704 HILL RD., MANHOLE \$2745 DITCH REVISED, E ROCKY BRANCH.	0-3 in.	0 ORIG	W42332	TH C	32 GRABS	01	03	ORIG - Original ODU - Duplicate
	MH2330	10-AUG-88	<b>S</b> 0	SOIL. EAST 1704 HILL ST , HAMHOLE #2745 DITCH REVISED E BOCKY BRANCH	0-3 Ln	0		ти с	12 CRABS	01	03	SPLT - Split QDM - Mix Check
	WH2331	10 AUG 88	<b>5</b> 0	SOIL, SOUTH, 1704 HILL RD , MANHOLE \$2745 DITCH EPA SPLIT BEVISED	0-3 in.	0 SPLT	WH2329	c	36 GRABS	04	03	LB - Lab
	MH2332	10 AUG-88	<b>S</b> 0	SOIL. SOUTH, 1704 HILL RD . MANHOLE #2745 DITCH, REVISED.E ROCKY BRANCH	0-3 in.	0 000	WH2329	TH C	36 GRABS	10	03	TM - TMS Analytical Services
	WH2333	10-AUC-88	SO	SOLL, NORTH, 1704 HILL RD., HANHOLE \$2745 DITCH, BEVISED, E-ROCKY BRANCH	0-3 IN	0		TH C	32 GRABS	D1	03	Indianapolis, IN
A-2	M12334	10-AUG-88	50	SOIL. NORTH, 1704 HILL RD , NORTH OF DITCH EAST ROCKY BRANCH	0-3 in	0		TH C	24 CRABS	01	03	MK - IT Analytical Services
21	WH2335	10-AUC-88	S0	SOIL, MORTH, 1704 HILL BD MORTH OF DITCH EPA SPLIT	0-3 LM	P SPLT	MH2334	c	24 CRABS	04	03	Middlebrook Pike Knoxvilla, TN
	WH2336	10-AUG-88	<b>\$</b> 0	SOLL, SOUTH, 1704 HILL RD NORTH OF DIJCH EAST ROCKY BRANCH	0-3 in	0		TH C	24 GRABS	01	03	Sample Status
	WH2337	10-AUC-88	50	SOIL, MEST, 1704 HILL RD , NORTH OF DITCH EAST ROCKY BRANCH	0-3 in	0		TH C	24 CRABS	01	03	01 - Rush 02 - Analyze (no rush)
	M12338	10-AUG-88	LI	LIGHTO, HEXAME, EQUIPMENT BINSE.		0 GRI		TH C	MA	01	03	01 - Hold 04 - EPA Split
	W(2339	10-AUG-88	11	LIQUID HEXAME TRIP BLANK		D QBL		TH C	MA	01	03	Analysis Request
	網2340	(1-AUC-88	SE	SEDIMENT BAYOU METO AT STP OUTFALL	0-1 in	0 ORIG	WH2341	TH G3	10 CRABS	01	<b>0</b> 3	03 - TCDD; 2,3,7,8~TCDD
	MH2341	11 - AUG-88	SE	SEDIMENT BAYOU METO AT STP OUTFALL	0-1 En	0 QDU	WH2340	TH G3	10 GRABS	01	03	04 - Other Analytical Parameters
	MH2342	11-AUG-88	SE	SEDIMENT, BAYOU METO AT STP OUTFALL EPA SPLIT	0-1 an	0 SPLT	VH2341	TM G3	10 GRABS	04	03	
	MH2343	11 - AUG - 86	50	SOIL. BAYOU METO STP OUTFALL 60 IN BICHT BANK	0-3 IN	0		TM G3	26 CRABS	01	03	
	HH2344	11 - AUG-88	SO	SOIL, BAYOU METO AT SIP OUTFALL. 36 IN RIGHT BANK	0-3 in	0		TH G3	26 CRABS	01	03	
	WH2345	11-AUG-88	50	SOIL BAYOU METO AT SIP OUTFALL, 6 1M . RIGHT BANK	0-3 in	D ONIC	WH2347	TH G3	26 GRABS	01	03	
	WK2346	11 - AUG-88	<b>S</b> 0	SOIL BAYOU METO AT STP OUTFALL. 6 IN RIGHT BANK EPA SPLIT	0-3 tn	0 SPLT	WH2345	CO	26 CRABS	84	03	
	WK2347	11-AUG-88	S0	SOIL, BAYOU METO AT STP OUTFALL, 6 IN , BIGHT BANK	0-3 in	8 QIDU	WH2345	TH G3	26 CRABS	01	03	

TABLE A-1 NUMERIC LISTING OF ALL SAMPLES COLLECTED

	SAMPLE Mumber	DATE SAMPLED	SAMP TYPE	SAMPLE LOCATION DESCRIPTION		FEET ABOVE WATER OC	OC PARTHER	REFERENCE LB AREAS	UNITS IN COMPOSITE		ANALYSIS Request	
	WH234B	11 - AUG-88	Sq	SOIL. BAYOU METO AT SIP OUTFALL. 60 IN LEFT BANK	0-3 in	0		TH G3	26 GRABS	01	03	
	WH2349	11 AUG-88	SØ	SOIL BAYOU METO AT STP OUTFALL, 36 IM . LEFT BANK	0-3 in	0 OR1	G WH2351	TH G3	26 GRABS	01	03	
	WH2350	11-AUG-88	50	SOIL, BAYOU METO AT SIP OUTFALL. 36 IN . LEFT BANK, EPA SPLIT	0-3 in	0 SPL	T MH2349	G3	26 CRABS	04	03	
	M12351	11-AUG-88	50	SOIL. BAYOU METO AT STP OUTFALL, 36 IN . LEFT BANK	0-3 in.	o apu	WH2349	TH G3	26 CRABS	01	03	TABLE KEY
	M12352	11-AUC-88	50	SOIL. BAYOU METO AT STP OUTFALL. 6 IN LEFT BANK	0-3 in	0		TH G3	26 CRABS	01	03	QC ~ Quality Control
	M12353	11 - AUG - 88	50	SOTE SOUTHWEST, 1704 HELL WOAD. WORTH OF POOL	0-3 in	0		TH C	36 GRABS	01	03	QRI - Rinse
	<b>M12</b> 354	11-AUG-88	50	SOIL. MORTHEAST. 1704 HILL ROAD. MORTH OF POOL	0-3 ta	0		ти с	36 GRABS	01	03	QBL - Blank ORIG - Original QDU - Dublicate
	M12355	11 AUG-88	SO)	SOIL. NORTHWEST, 1704 HILL ROAD. NORTH OF POOL	0-3 in	0 081	G WH2357	TH C	36 CHABS	DI	63	SPLT - Split QDM - Mix Check
	WH2356	11-AUG-88	<b>S</b> 0	SOIL, HORTHWEST, 1784 HILL ROAD. NORTH OF POOL EPA SPLIT	0-3 in	O SPL	T W12355	С	36 CRABS	04	03	LB - Lab
	WH2357	11-AUG-88	<b>S</b> 0	SOIL MORTHWEST, 1704 HILL BOAD, MORTH OF POOL	0-3 in	U GOU	WH2355	TH C	36 GRABS	01	03	TM - TMS Analytical Services
3	M12358	11-AUG 88	<b>S</b> 0	SOIL, EAST, 1712 HILL ROAD, MANHOLE MANGER 2741	0-3 in	0		TH C	35 CRABS	01	03	Indianapolis, IN
	M12359	11-AUG-88	<b>S</b> 0	SOIL, WEST, 1712 HILL ROAD, MANHOLE MUNBER 2741	0-3 in.	0		TH C	35 GRABS	01	03	MK - IT Analytical Services
	M12360	11-AUG-88	50	SOLL SOUTH, 1712 HILL BOAD, MANHOLE NUMBER 2741	0-3 in	0		TH C	35 GRABS	01	03	Middlebrook Pike Knoxville, TN
	MH2361	L1 - AUG - 88	SO	SOIL, SOUTH, 1712 HIEL ROAD, MANHOLE MEMBER 2741. EPA SPEIT	0-3 in	0 SPL	T WH2360	c	35 GRABS	04	03	Sample Status
	WH2362	11-AUG-88	50	SOIL. SOUTH, 1804 HILL BOAD, NAMHOLE MUNBER 2746	0-3 an	0		TH C	35 GRABS	01	03	0) - Rush 02 - Analyze (no rush)
	WH2363	11-AUG-88	SO	SOIL, WEST, 1804 BILL BOAD, HANHOLE NUMBER 2740	0-3 in	0		TH C	35 GRABS	Di	03	03 - Hold 04 - EPA Split
	<b>WH2364</b>	11-AUG-88	90	SOIL, MEST, 1804 HILL ROAD, NAMHOLE NUMBER 2740. EPA SPLIT	0-3 1n	O SPL	T WH2363	c	35 GRABS	04	63	Analysis Request
	WH2365	11 AUC-88	<b>S</b> 0	SOIL, EAST, 1804 HILL ROAD, MANHOLE MUMBER 2740	0-3 in	0		TH C	35 CRABS	01	03	03 - TCDD; 2,3,7,8-TCDD
	M12366	11-ADC 88	50	SOIL DITCH IN BACKYARD OF 1712 AND 1804 HILL ROAD	0-3 in	0		TH C	7 CRABS	01	03	04 - Other Analytical Parameters
	WH2367	11 - AUG-88	ŁΙ	LIQUID, HEXAME, EQUIPMENT RINSE		0 úri		TH C	MA	01	03	
	¥H2368	11-AUC-88	50	SOIL, DITCH IN BACKYARD OF 1712 AND 1804 HILL ROAD, EPA SPLIT	0-3 IN	O SPL	T MH2366	c	7 CRABS	04	03	
	<b>4</b> H2369	11 - AUG - 88	<b>S</b> 0	SOIL, DITCH BEHIND 1704 HILL ROAD. EPA SPLIT	0-3 1a	O SPL	T WH2371	c	10 GRABS	04	03	
	WH2370	88- DUA-11	LI	LIGUID, HEKANE TRIP BLANK		g obs		TH C	М	19	03	
	WH2371	11 - AUG-88	50	SOIL DITCH BEHIND 1704 HILL ROAD WEST OF MANHOLE NUMBER 2745	0-3 in	0		тн с	10 GRABS	01	03	
	MH2372	12-AUG 88	So	SOIL, MARSHALL ROAD MANHOLE MRMBER 1152 NORTHEAST	0-3 In	0		TH C	30 GRABS	61	03	

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TABLE A-1 NUMERIC LISTING OF ALL SAMPLES COLLECTED

SAMPLE Number	DATE Sampled	SAMP TYPE SAMPLE LOCA	TION DESCRIPTION		DEPTH OF TAKE	FEET ABOVE WATER OC	REFERENCE QC PARTHER LB AREAS	UNITS IN COMPOSITE		ANALYSIS REQUEST	
WH2373	12-AUG-88	SO SOIL. MARSH	ALL ROAD MANHOLE HUMBER	1152. SOUTHWEST	D-3 in.	0	TH C	30 CRABS	01	03	
WH2374	12-AUG-88	SO SOIL. HARSH	IALL ROAD MANHOLE HUMBER	1152. NORTHWEST.	0-3 in.	0	TH C	30 GRABS	01	03	
WH2375	12-AUG-88	SO SOIL. ROW 5	, NORTH. 250-500 FT.NEST	ROCKY BRANCH.	D-3 in.	0	тнс	25 CRABS	01	03	
MH2376	12-AUG-88	SO SOIL, ROW 5	, WEST. 250-500 FT. HEST	ROCKY BRANCH.	0-3 in.	0	TH C	25 GRABS	01	03	TABLE KEY
WH2377	12-AUG-88	SO SOIL. ROW S	S. SOUTH. 250-500 FT. NEST	ROCKY BRANCH.	0-3 in.	0	TH C	25 GRABS	01	03	QC - Quality Control
WH2378	12-AUG-88	SO SOIL, ROW 6	, NORTH. 250-500 FT.NEST I	ROCKY BRAINCH	0-3 in.	0	ти с	21 GRABS	01	03	QRI - Rinse
WH2379	12-AUG-88	SO SOIL, ROM 6	, WEST, 250-500 FT. HEST I	ROCKY BRANCH.	0-3 in.	0	TM C	21 GRABS	01	03	QBL - Blank ORIG - Original QDU - Duplicate
WH2380	12-AUG-88	SO SOIL. ROW 6	. SOUTH. 250-500 FT. HEST	ROCKY BRANCH.	0-3 in.	D	тн с	21 GRABS	01	03	SPLT - Split QDM - Mix Check
WH2381	12-AUG-88	LI LIQUID, HEX	AME, EQUIPMENT RINSE			190 0	TH C	MA	01	03	LB - Lab
WH2382	12-AUG-88	LI LIQUID, HEX	CAME. TRIP BLANK.			O QBL	ти с	MA	01	03	TM - TMS Analytical Services
= MH2383	07-SEP-88	SO SOIL. GARDE	UN AT 2113 BRADEN.		0-3 in.	0	TH D	6 grabs	01	63	Indianapolis, IN

536 records selected

Sample Status

MK - IT Analytical Services

01 - Rush 02 - Analyze (no rush) 03 - Hold

Middlebrook Pike Knoxville, TN

04 - EPA Split

#### Analysis Request

03 - TCDD;

2,3,7,8-TCDD 04 - Other Analytical Parameters

TABLE A-2

TABLE A-2 NUMERIC LISTING AND ANALYTICAL RESULTS OF ALL SAMPLES SUBMITTED FOR DIOXIM AMALYSIS

	SAMPLE Mumber	SAMP Type	TCDD Q			DIOXIN E UNITS	DATE SAMPLED	ABC MAT	OVE FER SAMPLE LOCATION DESCRIPTION			REFERENCE AREAS			UNITS IN Composite	SAME STAT	rus
	WH2205	LI	3 U			ng/sample	19-JUL-88		O LIQUID, HEXAME, TRIP BLANK.			С	OBL.		MA	01	•••
	WH2206	SE	1 69	.29	0-4 in	. ppb	21-JUL-88	-3	5 SLUDGE. WEST END OF MORTH OXIDATI	OW P	OND, TOP SEDIMENT/SLUDGE	61			4 GRABS	01	
	WH2207	ω	3 <b>U</b>		0-3 in	ppb	21-JUL-88		-5 SLUDGE, WEST END OF MORTH OXIDATI	ON P	OND. INTERFACE	G)			4 CORINGS	Øi	
	WH2208	SE	l 702	97	0-4 10	ppb	21-JUL 88	-3	5 SLUDGE, EAST END OF NORTH OXIDATE	ON P	OND. TOP SEDIMENT/SLUDGE	G1			4 GRABS	01	
	WH2209	co	3 U		0-3 in	ppb	21 - JUL-88		-5 SLUDGE, EAST HALF OF NORTH OXIDATE	OK P	OND INTERFACE	GI	ORIG	WH2210	4 CORINGS	01	
	WH2210	00	.3 V		0-3 in	ppb	21 - JUL-88		-5 SEURGE. EAST HALF OF NORTH OXIDATE	ON P	OND, INTERFACE	G1	000	WH2209	6 CORTINGS	01	TABLE KEY
	M12212	œ	3 1/		0-3 in	ppb	21-JUL-88		-5 SLUDGE, WEST END OF SOUTH OXIDATE	ON P	OND, INTERFACE	G2			4 CORINGS	OL	Q - Qualifler U - Not Detected
	HH2213	SE	3 0		0-4 in	. ppb	21-JUL-88	-3	5 SLUDGE, WEST END OF SOUTH CHIDATE	ON P	OND, TOP SEDIMENT/SLUDGE.	G2			4 GRABS	01	at stated concentration
	WH2214	00	.3 V		0-3 in	ppb	21-JUL-88		-5 SLUDGE, EAST END OF SOUTH OXIDATIO	OH P	OND, INTERFACE	G2			4 CORINGS	OL	T - To be reported in supplement
A	W62215	SE	.3 V		0-4 in	. ppb	21-JUL-88	- 3	1.5 SLUDGE, EAST END OF SOUTH OXIDATE	ON P	OND, TOP SEDIMENT/SLUDGE.	G2			4 GRABS	01	to this report
4	WH2220	SE	.3 U		0-2 in	. ppb	22-JUL-88	-	12 SLUDGE, MORTH QUADRANT OF AERATIO	₩ B	ASIN. TOP SEDIMENT/SLUDGE	F			6 GRABS	01	QC - Quality Control
	MH2221	S€	2 705	1 41	0-2 in	ppb	22 · JUL-88	-	12 SLUDGE, NORTH-EAST QUADRANT AERATI	ON B	ASIN, TOP SEDIMENT/SLUDGE	F			6 CRABS	01	QRI - Rinse QBL - Blank ORIG - Original
	MH2222	SE	2.84	2.83	0-2 in	bbp	22 · JUL - 88	-	12 SLUDGE, SOUTH QUADRANT AFRATION	B	ASIN, TOP SEDIMENT/SLUDGE	F	OBIG	WL2226	6 GRABS	01	QDH - Duplicate SPLT - Split QDH - Mix Check
	Mf2224	SE	71		0-2 in	ppb	22-JUL-88	-	12 SLUDGE, SOUTH-WEST QUADRANT AERATI	OM B	ASIN, TOP SEDIMENT/SEUDCE.	F			6 GRABS	01	
	WH2226	SE	2 336	1 07	0-2 in	ppb	22-JUL-88	-	12 SLUDGE, SOUTH QUADRANT AFRATION	B.	ASTAL TOP SEDIMENT/SLUDGE	F	ODU	<b>W</b> 12222	6 GRABS	01	Sample Status 01 - Rush
	WH2227	00	.3 U		0-1 in	ppb	22-JUL-88	-	15 SLUDGE, MORTH QUADRANT AERATION	P	OND. INTERFACE.	F			6 CORINGS	01	02 - Analyze (no rush) 03 - Hold
	H12228	00	.3 U		0-1 in	ppb	22-JUL-88	-	15 SLUDGE, MORTH-EAST QUADRANT, AERATI	ON B	ASIM. INTERFACE	F			6 CORINGS	01	
	WH2229	00	.3 U		0-1 1n	ppb	22-JUL-80		15 SLUDGE SOUTH QUADRANT AFRATION	B	ASIN. INTERFACE	F	ORIG	WH2230	6 CORINGS	01	
	<b>W</b> 12230	00	3 U		0-1 in	ppb	22- JUL-88	-	15 SLUDGE, SOUTH QUADRANT ABRATION	В	ASIM. IMTERFACE	F	000	VH2229	6 CORINGS	01	
	WK2232	œ	3 U		0-1 in	p <b>pb</b>	22-JUL-88	-	15 SLUDGE, SOUTH-WEST QUADRANT AERATE	ON B	ASIM. INTERFACE	F			6 CORINGS	01	
	WH2233	<b>S</b> 0	3 N		0-3 in	ppb	23-JUL-88		8 SOIL EAST, 1008-1250 FT. E. ROCK	у в	B BESAMPLE ROW L.EXCEPT DIRT PILI	E C			43 CRABS	01	
	MH2234	50	3 V		0-3 in	ppb	23-JUL-88		0 SOIL EAST, 1000-ROAD, E BOCKY B	18 R	ESAMPLE, ROW I. EXCEPT DIRT PILE	C			35 GRABS	01	
	WH2235	50	3 8		0-3 in	ppb	23-JUL-88		0 SOIL, EAST, ROAD 1250 FEET, EAST		OCKY BRANCH RESAMPLE, ROM 1	c			8 CRABS	01	
	MH2236	50	3 U		0-3 in	ppb	23-JUL-88		O SOIL, WEST, NAMHOLE NUMBER 2735 A	1 6	17 OAKLEY	c			35 GRABS	01	
	WH2237	<b>S</b> 0	3 U		0-1 in	ppb	23-JUL-88		0 SOIL, NORTH, MANHOLE NUMBER 2735	AT 6	17 OAKLEY	С			35 GRABS	01	

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TABLE A-2 MUMEBIC LISTING AND AMALUTICAL RESULTS OF ALL SAMPLES SUBMITTED FOR DIOXID AMALYSIS

	SAMPLE Number	SAMP TYPE	TCDD Q	2378 TCDD Q	DEPTH OF TAKE		DATE SAMPLED	FEET ABOVE MATER SAMPLE LOCATION DESCRIPTION	REFERENCE AREAS	OC QA/OC CODE PARTMER	COMPOSITE	
	VM2238	50	3 <b>V</b>		0-3 10	ppb	23-JUL-88	0 SOIL, SOUTH, MANHOLE WUMBER 2735 AT 617 CARLEY	С			01
	M12240	u	58			ng/sample	23-JUL-88	O LIQUID HEXANE, EQUIPMENT MINSE	c	061	2 ATMSES	01
	WH2246V	LI	61			ng/sample	23-JUL-88	9 LIGHTO, HEXAME, EQUIPMENT BINSE. VERIFICATION ANALYSIS OF MR2240	c	QR)	2 RINSES	01
	1812241	S0	3 (		0-3 1A	ppb	23-JUL-88	5 SOLL, 2510-2940 FT. & ROCKY BRANCH, RESAMPLE, 6 IN LEVEL, RIGHT BANK.			38 GRASS	<b>01</b>
	HF(2242	50	3 <b>U</b>		8-3 in.	ppb	23-JUL-88	D SOIL VACANT LOT AT PARKING AREA MAT TO GATE BETWEEN 3010 & 3018 HIMES	P		MA	81
	M12243	S0	3 ม		0-3 <sub>10</sub>	ppb	23- JUL-88	O SOIL. FIELD MEHIND CHURCH ON BRADEN STEET,	D		WA	01 TABLE KEY
	M12244	50	3 0		0-3 in	ppb	25-JUL-88	D SOLE, 604 SROOKHAVEN COURT, NIDOLE OF FENCE, BETWEEN FENCE & GOOL	0		XL	Q - Qualifier 01 U - Not Detected
	<b>1812245</b>	<b>S</b> 0	3 ט		0-3 in	ppb	25-JUL-88	0 SOIL, 604 CHERYL, MIDDLE OF FEMCE ACROSS BACKYARD	D		MA	at stated concentration
	WH2246	S0	.3 U		0-3 in	ppb	25 - JUL-88	G SOIL 2200 BRADEM. 4' WORTH SIDE OF TELEPHONE POLE ON COMMER	D		KA	01 T - To be reported in Supplement
P	WH2247	S0	3 U		0-3 10	ppb	25 ~ JUL - 88	8 SOIL 2111 BRADEM, BETWEEN PLANTS & HOUSE, 4 FT ON WEST SIDE	D		MA	to this report
S S	WH2249	<b>S</b> 0	723		0-3 in	ppb	24 - JUL-88	0 SOIL, ROM 3, MORTH, 0-250 FT. WEST ROCKY BRANCH	C		50 GRABS	01 QC - Quality Control
	MH2250	<b>S</b> 0	.794		0-3 in	ppb	24 - JUL-88	0 SOIL. BOW 3, WEST. 0-250 FT, WEST BOCKY BRANCH	C		50 CRABS	ORIG - Original
	MH2252	S0	869		0-3 in	ppb	24 - JUL-88	@ SOIL. ROW 3, SOUTH, 0-250 FT. WEST ROCKY BRANCH	¢		50 GRABS	QDU - Duplicate 01 SPLT - Split QDM - Nix Check
	WH2256	Lī	3 U			ug/sample	24 - JUL-88	O LIGUID HEXAND EQUIPMENT RINSE	c	QRS	2 RINSES	61
	WH2257	<b>S</b> 0	1.74	1 08	0-3 in	ppb	24 - JUL-88	0 SOIL. ROW 3, MORTH, 250-500 PT.WEST ROCKY BRANCH	¢		50 GRABS	Sample Status 01 01 - Rush
	WH2258	50	1 476	1 74	0-3 in.	ppb	24 - JUL-88	6 SOIL, ROW 3, SOUTH, 250-500 FT.WEST ROCKY BRANCH	с		50 GRABS	01 - Analyze (no rush) 01 03 - Hold
	M(2259	50	961	96	0-3 in	ppb	25-JUL-88	6 SOIL, BON 3, WEST, 250-500 FT. MEST ROCKY BRANCH	c		SO CRABS	01
	WH2260	S0	867	1 15	0-3 in	ррб	25- <b>JUL</b> -88	0 SOIL ROW 4. NORTH, 250-500 FT WEST ROCKY BRANCH	c		50 GRABS	01
	MK226 E	50	1 476	1 32	0-3 in.	ppb	25 - JUL 88	D SOIL ROW 4, SOUTH, 250-500 FT, WEST BOCKY BRANCH	C		50 GRABS	01
	MH2262	50	1 255	1 45	0-3 in	\$P\$	25-JUL-88	0 SOIL ROW 4 WEST, 250-500 FT, WEST BOCKY BRANCH	c		50 GRABS	01
	M12263	50	417		0-3 15	hbp	25-JUL-88	0 SOIL, ROW 3, WEST, 500-750 FT, WEST ROCKY BRANCH	C		48 CRABS	01
	MH2264	S0	3 8		0·3 in	bbp	25-JUL-88	0 SOIL, ROW 3, MORTH 500-750 FT.WEST BOCKY BRANCH	С		48 GRABS	ρı
	MH2266	<b>S</b> 0	3 U			ppb	24-JUL-86	9 SOIL. BLANK	c	QBL	MA	01
	M12267	<b>S</b> 0	3 U		0-3 1s	ppb	25-JUL-88	0 SOIL, ROW 3, SOUTH, 500-750 FT.WEST GOCKY BRANCH	e		48 CRASS	01
	NH2271	SØ	729		91 E O	pph	25 - JUL-88	O SOIL, ROW 3, WEST 750-930 FT. WEST BOCKY BRANCH	c		30 GRABS	91

TABLE A-2 MUMERIC LISTING AND ANALYTICAL RESULTS OF ALL SAMPLES SUBMITTED FOR DIOXIN ANALYSIS

SAPLE	SAMP TYPE	TCDO Q		DEPTH OF TAX	DIOXEN ONITS	DATE SAMPLED	FRET ABOVE HATER SAMPLE LOCATION DESCRIPTION	REFERENCE AREAS	OC DA/OC CODE PARTNER	UMITS IN COMPOSITE		
WH2272	\$0	695		0-3 in	ppb	25-JUL-88	D SOIL, ROW 1, MONTH, 750-930 FT, MEST ROCKY BRANCH	c	· •••	30 CRABS	01	
MH2273	90	.584		0-3 in	ppb	25-JUL-88	0 SOIL, ROM 3, SOUTH, 750-930 FT MEST ROCKY BRANCH	c		30 GRABS	01	
WH2277	50	539		0-3 in	ppb	25-JUL-88	D SOIL. ROW 3, NORTH, 2112 WEST LANE	c		32 GRABS	01	
MH2278	\$0	.716		0-3 in	. ppb	25-JUL-88	0 SOIL, ROW 3, SOUTH. 2112 WEST LANE.	C		32 GRABS	<b>0</b> 1	
MH2280	LI	.3 U			ng/sampl	e 25-JUL-88	O LEGUID, MEXAME. BOUTFMENT RINSE.	C	QR1	2 RIMSES	<b>0</b> 1	
M(2281	LI	3 U			ng/sampl	e 25-JUL-88	G LIQUID, HEXAME, TRIP BLANK	c	GBL	MA	01 T	ABLE KEY
WH2282	<b>S</b> 0	575		0-3 in	. ppb	25-JUL-88	0 SOIL, ROW 3, WEST, 2312 WEST LANE.	c		32 GRABS	01	- Qualifier
WH2286	50	1.621	.33	0-3 in	. ppb	26-JUL-88	8 SOIL. BOW 3, SOUTH. 2283 BRADEN	C		27 CRABS	<b>01</b>	<ul> <li>Not Detected at stated concentration</li> </ul>
WH2287	50	3 U		0-3 in	ppb	26 - JUL-68	G SOIL, BOW 3 MORTH, 2203 BRADEN,	C		27 GRABS	01 T	- To be reported in supplement
M12288	\$0	V		0-3 in		26~JUL-88	0 SOIL, BOM 3, MORTH, 2203 BRADIEN, IPA SPLIT	C	SPLT WH2287	27 CRAMS	04	to this report
AT MH2289	so	3 (		0-3 In	. ppb	26-JUL-88	D SOIL, NOW 3, WEST, 2203 BRADEN.	С		27 CRABS	01 Q	- Quality Contro
WH2290	50	3 U		0-3 in	. ppb	26-JUL-88	0 SOIL. ROW 4, MEST, 2203 BRADEN	c		24 GRABS	81 Q1	RI - Binse BL - Blank RIG - Griginai
i#12291	50	3 8		0-3 in	. ppb	26 - JUL-88	O SOIL. HOW 4, SOUTH 2203 BRADEN.	С		24 CRABS	01 SI	DU - Duplicate PLT - Split
WH2292	50	.3 0		0-3 in	ppb	26 - JUL - 88	0 SOIL, ROW 4 MORTH, 2203 BRADEN.	C		24 CRABS		JM - Mix Check
WH2293	SO	387		0-3 in	ppb	26-JUL-88	6 SOIL, BOW 3, SOUTH. 2202 BRADEN.	С		36 GRABS	01	omple Status L - Rush
WHI2294	50	3 U		0-3 in	ppb	26-JUL-88	0 SOIL, ROW 3, WEST. 2202 BRADEN	c		36 GRABS	02	? - Analyze (no ru ) - Hold
WK2295	50	3 U		0-3 in	ppb	26 · JUL · 88	8 SOIL, BOW 3, NORTH, 2202 BRADEN	c		36 GRABS	01	
WH2305	. so	1 077	1 82	0-3 in	bbp	26 - JUL-88	0 SOIL, BOW 3, MORTH, 1704 HILL BOAD.	С		28 GRABS	<b>0</b> 1	
MH2306	50	949	2 44	0-3 in	ppb	26-JUL-88	0 SOIL. ROW 3. SOUTH 1704 HILL BOAD	c		28 CRABS	01	
VH2307	so	2 503	1 69	0-3 n	ppb	26 - JUL-88	0 SOIL, ROW 3, EAST, 1704 HILL ROAD	С		28 GRABS	01	
WH2308	50	603		0-3 in	ppb	26-JUL-88	0 SOIL, ROW 4. EAST, 1704 HILL ROAD	c		28 GRABS	01	
WH2309	) SO	3 V		0-3 in	. ppb	26-JUL-88	0 SOIL, ROM 4, MORTH, 1704 HILL ROAD	c		28 CRABS	01	
WH2310	S0	894		0-3 in	ppb	26 - JUL-88	0 SOIL, ROW 4, SOUTH, 1704 HILL BOAD	c		28 GRABS	01	
WH2311	\$0	3 U		0-3 in	ppb	26 - JUL-88	0 SOIL, WEST MARKERS, SOUTH OF DITCH, MARRIOLE #2745, 1704 HILL ROAD	c		25 CRABS	01	
WK2317	so	.3 8		0-3 in	ppb	26 - JUL-88	O SOIL, EAST MARKERS, SOUTH OF DITCH, MANHOLE #2745, 1704 HILL ROAD	С		25 CRABS	01	

TABLE A-2 NUMERIC LISTING AND AMALTICAL RESULTS OF ALL SAMPLES SURRITTED FOR DIOXIM AMALTSIS

	SAMPLE MUMBER	SAMP TYPE	TCDD Q		DEPTH OF TAKE		DAYE SAMPLED	FEET ABOVE HATER SAM								REFERENCE AREAS			UNITS IN COMPOSITE	SAMPI Stati	
	MH2313	\$0	.519		0-3 1n	ppl	26-JUL 88								D4 HILL BOAD	c	••••	••	28 GRABS	01	-
	W(23) 4	<b>S</b> 0	2 849	3 09	0-3 in	ppb	26-JUL-88	0 501	(L, S001	TH MARKER	, MORTH OF	DITCH,	MANIPOLE /	<b>\$</b> 2745, 17	04 HILL BOAD	c	ORIG	₩£2316	40 GRABS	01	
	WH2316	S0	2.814	2 69	ai E-0	ppb	26-JUL-88	6 501	il. sout	TH HARKER	. WORTH OF	ditch,	LICHNAR	12745, 17	O4 HILL ROAD	c	QDU	WH2314	48 GRABS	81	
	₩:231 <i>7</i>	50	2 875	3 25	0-3 In	ppb	26-JUL-88	0 SOI	il. Basi	T MARKERS	, MORTH OF	DITCH,	HANHOLE (	12745, 17	O4 HILL BOAD	c			40 CRABS	01	
	WK2318	<b>S</b> 0	J 183	3 85	0-3 ja	ppb	26-JUL-88	0 SO1	el. West	T MARKERS	, NORTH OF	DITCH,	HANGIOLE (	<b>1</b> 2745, 17	D4 HILL BOAD.	c			40 CRABS	01	
	WH2319	LI	.3 (r			ng/sample	26-JUL-88	0 LIG	WID, HI	EXAME, EQ	UJP <b>ycht rj</b> i	SE				C	GRI		MA	01	TABLE REY
	WK2320	LI	.3 0			ng/sample	26-JUL-88	0 LIQ	WID, H	EXAME, TR	IP BLANK.					C	CIBL		KA	01	Q - Qualifier
	W(2321	<b>S</b> 0	1 775	1 88	0-3 in	ppb	10-AUG-88	0 501	IL, ROW	1 WEST.	1704 HILL	BOAD.	REVISED.	EAST BOO	XY BRANCH	c	ORIG	W12324	21 GRABS	01	U - Not Datected at stated concentration
	HH2322	<b>S</b> 0	1 682	3 65	0-3 in	ppb	10-AUG-88	0 SOI	IL, ROW	1, SOUTH	. 1704 HELL	ROAD,	REVISED,	EAST ROO	XY BRANCH	c			21 GRABS	61	T - To be reported
_	<b>18</b> 12324	S0	2 388	2 3	0-3 ia	ppb	10-AUG-88	0 501	IL, BOW	I. WEST.	1704 HTLL	BOAD,	REVISED,	EAST ROO	XY BRANCH	С	QQU	WH2321	21 GRABS	01	in supplement to this report
3	HH2325	<b>S</b> 0	2 654	2.66	0-3 in	ppb	10-AUG-88	0 501	IL. ROW	i, Morth	, 1704 HZLI	ROAD,	AEVISED,	EAST BOO	KY BRANCH	c			21 GRABS	01	QC - Quality Control
	H42326	50	10 427	10 92	0-3 in	ppb	10-AUG-88	0 501	IE. ROM	2. MEST.	1704 HILL	SCAD.	REVISED,	EAST ROO	XY BRANCH	c			21 GRABS	01	QRI - Rinse QBL - Blank
	M12327	SO	5.985	5 76	0-3 In	ppb	10-40G-88	0 501	IL. ROU	2, NORTH	I, 1704 RELI	L ROAD.	REVISED,	EAST ROO	XY BRANCH	С			21 GRABS	01	ORIG - Original QDU - Duplicate SPLT - Split
	WH2328	Sõ	11 297	12 32	0-3 in	ppb	10-AUC-88	0 501	IL, RON	2, SOUTH	i, 1704 HTL	L BOAD	REVISED,	EAST NO	TY BRANCH	с			21 CRABS		QDM - Mix Check
	MH2329	<b>S</b> 0	3 465	3.34	0-3 in	ppò	10-AUG-88	D SOI	IL, SOU	TH. 1704	HILL NO . 1	MANHOLE	\$2745.DI	TCH REVIS	SED. E BOOKY BRANCH	. с	0816	WH2332	32 GRABS	01	Sample Status
	NH2 130	SO	3 232	3.19	0-3 in	ppb	LO-AUG-88	8 SOI	IL. EAS	IT. 1704 H	IILL ST., M	ANHOLE	\$2745 DI	TCH BEVIS	SED. E BOCKY BRANCH	. <b>c</b>			32 CRABS		01 - Rush 02 - Analyze (no rush) 03 - Hold
	WH2332	50	2 863	2 78	0-3 in	ppò	10-AUG-88	0 50	IL. SOU	ITH. 1704	HILL RD., I	MANHOLE	82745 DE	TCH, NEVES	SED, E ROCKY BRANCH	С	adu	M12329	36 GRABS	01	
	WH2333	50	4 997	4 8	0-3 in	ppb	88-2U4-01	0 501	EL. MOR	ITH, 1704	HILL RD , 6	MURHOLE	82745 D(	TOH REVIS	SED.E ROCKY BRANCH	. с			12 GRABS	۵į	
	VH2334	50	335		0-3 IN	ppb	10-AUC-68	0 50	IL. NOR	ITH. 1704	HILL RD., M	ORTH OF	DETCH. E	AST ROCK	Y BRANCH	c			24 GRABS	01	
	WH2336	50	334		0-3 in	ppb	10-AUG-88	0 S0	IL SOU	JTH. 1704	MILL AD .M	ORTH OF	DITCH E	AST ROCK!	Y BRANCH	c			24 GRABS	01	
	WH2337	50	372		0-3 1n	ppb	10-AUG-88	0 SO	ML. WES	ST 1704 B	HILL RD . N	ORTH OF	DITCH E	AST ROCK	Y BRANCH	С			24 CRARS	81	
	MH2338	ш	3 U			nę/sasple	LD-AUG-BB	D LIG	CUID. H	EXAME, EG	ULIPHENT AL	MSE				С	190		NA	01	
	WH2339	LI	3 U			ng/saaple	10-AUG-88	0 LI	QUID. P	EXAME TH	IP BLANK					c	QBL		MA	ΰl	
	HH2340	SE	3 U		0-1 ta	ppb	11-AUC-88	0 SEI	DIMENT	BAYOU NET	TO AT STP O	OTFALL				G3	0810	MH2341	10 GRABS	01	
	WH2341	SE	3 <b>u</b>		0 1 In	ppb	11-A9G-88	D SE	DIHENT.	BAYOU MET	IC AT STP O	UTFALL				C)	000	WH2340	10 GRABS	01	•

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TABLE 4-2 NUMERIC LISTING AND ANALYTICAL RESULTS OF ALL SAMPLES SUBMITTED FOR DIDXIM ANALYSIS

SAMPLE Mumber	SAMP Type	TCD0 o		DEPTH OF TAKE		DATE SAMPLED	FEET Above Water Sample Location description	AREAS	GC GA/GC CODE PARTNE			
M12343	50	3 U		0-3 in	bbp	11-AUG-88	O SOIL BAYOU METO STP OUTFALL.60 IN. RIGHT BANK	G3		26 GRARS	01	
MH2344	\$0	3 U		0-1 in	ppb	11-AUG-88	O SOIL BAYOU METO AT STP OUTFALL, 36 IN , RIGHT BANK	63		26 GRABS	01	
MH2345	SO.	.3 0		0-3 in	ppb	11-AUC-88	O SOIL, BAYOU MEYO AT STP OUTFALL, 6 IN . RIGHT BANK	63	ORIG WH2347	26 CRARS	91	
M12347	S0	3 U		0-3 ín	ppb	1 J - AUG-68	O SOIL. BAYOU METO AT STP OUTFALL, 6 IN , RIGHT BANK	<b>C</b> 3	QDU 4H2345	26 CHARS	01	
WH2348	<b>S</b> 0	3 U		0-3 LN	ppb	11-AUG-68	O SOIL BAYOU METO AT STP OUTFALL, 60 IN , LEFT BANK	<b>G</b> 3		26 GRABS	01	
W12349	50	.3 tr		0-3 in	ppb	11-AUG-88	O SOIL, BAYOU METO AT STP OUTFALL, 36 IN., LEFT BANK	G3	ORIG WH2351	26 GRASS	01 TJ	ABLE KEY
WHZ351	50	.3 0		Q-3 in.	ppb	1 L - AUG-68	O SOIL, BAYOU METO AT STP OUTFALL, 36 IN , LEFT BANK	<b>G</b> 3	QDU VH2349	26 GRABS	01 <sup>-</sup>	- Qualifier
WH2352	50	.3 0		0-3 in	ppb	11-AUG-88	O SOIL, BAYOU METO AT STP OUTFALL, 6 IN , LEFT BANK.	<b>G</b> 3		26 GRABS		<ul> <li>Not Detected at stated concentration</li> </ul>
WH2353	<b>SQ</b>	6.939	7 16	0-3 in	ppb	11-AUC-88	0 SOIL, SOUTHMEST, 1704 HILL BOAD, BORTH OF POOL	С		36 GRABS	01 τ	- To be reported In supplement
P MH2354	50	6.651	6.52	0-3 in.	pçb	11-AUG-88	O SOIL, MORTHEAST, 1704 HILL BOAD, MORTH OF POOL	С		36 GRABS	01	to this report
i 숤 MH2355	<b>S</b> 0	11 577	11 65	0-3 in	ppb	1 ] -AUC-88	0 SOIL, MORTHWEST, 1704 HILL BOAD, MORTH OF POOL	с	ORIG WH2357	36 GRABS	01 QC	: - Quality Contro
MH2357	\$0	5 128	5 1	0-3 fn	ppb	11-AUG-88	0 SOIL, NORTHWEST, 1704 HILL ROAD, NORTH OF POOL.	¢	CIDN WH2355	36 GRABS	D1 QE	:
WH2358	<b>S</b> 0	3 <b>u</b>		0-3 in	ppb	11-AUG-88	D SOIL, EAST, 1712 HILL BOAD, MANHOLE MEMBER 2741	c		35 GRABS	OI SE	U - Duplicate LT - Split
WH2359	SO	3 8		0-3 in	ppb	1 1 - AUC-88	D SOIL, MEST, 1712 HILL ROAD, MANNOLE NUMBER 2741	С		35 GRABS		M - Hix Check
WH2360	50	. 3 U		0-3 in	ppb	1 1 - ABG-88	G SOLL, SOUTH, 1712 HILL ROAD, MANHOLE HOMBER 2741	c		35 GRABS	01	mple Status
WH2362	50	. 3 V		0-3 in.	ppb	11-AUG-88	D SOIL, SOUTH, 1804 HILL ROAD, MANHOLE MUNBER 2740	C		35 CRABS	0.2	Rush :- Anālyze (ло ru: - Hold
<b>WH2363</b>	SO	.3 U		0-3 ın	ppb	11-AUG-88	O SOIL, WEST, 1804 HILL BOAD, MANHOLE MUMBER 2740	c		35 GRABS		
WH2365	80	3 0		0-3 in	bóp	11-AUG-88	O SOIL, EAST, 1804 HILL BOAD, MANHOLE HUMBER 2740	С		35 GRABS	01	
WH2366	<b>S</b> 0	.3 ម		0-3 in	ppb	11-AUG-68	G SOIL, DITCH IN BACKYARD OF 1712 AND 1864 HILL BOAD	c		7 GRABS	10	
MH2367	Lī	3 0				11-AUG-88	O LIQUID, HEXANE, EQUIPMENT RINSE	c	ONI	MA	Ď1	
MH2370	LI	.3 0				11-AUG-88	O LIQUID. HEXARE, TRIP BLANK	с	GBL	NA	01	
MH2371	S0	41 912	54 73	0 3 in	ppb	11-AUG-88	O SOIL, DITCH BEHTAD 1704 HILL ROAD, MEST OF MANHOLE MUMBER 2745	· .		10 GRABS	61	
M12372	SO	3 U		0-3 in	ppb	12 AUG-68	O SOIL, MARSHALL ROAD MANNOLE MANNER 1152, NORTHEAST	С		30 GRABS	01	
WH2373	50	3 11		0-3 in	ppb	12-AUC-88	Q SOIL, MARSHALL ROAD MANHOLE MUNDER 1152, SOUTHWEST	с		30 CRABS	01	
WH2374	SO	3 8		0-3 in	dod	12-AUC-88	O SOIL, HARSHALL BOAD MANHOLE NUMBER 1152, NORTHWEST	c		30 CRARS	61	

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#### TABLE A-2 NUMERIC LISTING AND ANALYTICAL RESULTS OF ALL SAMPLES SUBMITTED FOR DIOXIN ANALYSIS

SAMPLE Number	SAMP Type	TCDD Q		DEPTH OF TAI	DIOXIN CE UNITS	DATE SAMPLED	FEET ABOVE WATER S			QC QA/C		SAMPL STATU	· <del>-</del>
WH2375	<b>\$</b> 0	1.239	1.23	0-3 is	n. ppb	12-AUG-88	0 S	SOIL, ROW 5, NORTH, 250-500 FT, WEST ROCKY BRANCH.	c		25 GRABS	01	
WH2376	\$0	1.275	1.28	0-3 is	ı. ppb	12-AUG-88	0 S	SOIL, ROW 5, WEST, 250-500 FT, WEST ROCKY BRANCH.	С		25 GRABS	01	
WH2377	50	1.334	1.34	0-3 i	ı. ppb	12-AUG-88	0 S	SOIL, ROW 5, SOUTH, 250-500 FT, WEST ROCKY BRANCH	С		25 GRABS	01	
WH2378	<b>S</b> 0	.849		0-3 i	a. ppb	12-AUG-88	0 S	SOIL, ROW 6, NORTH, 250-500 FT, WEST ROCKY BRANCH.	с		21 GRABS	01	
WH2379	\$0	89		0-3 is	n ppb	12-AUG-88	0 S	SOIL, ROW 6, WEST, 250-500 FT, WEST ROCKY BRANCH.	c		21 GRABS	<b>0</b> 1	
WH2380	\$0	.96		0-3 i	a. ppb	12-AUG-88	0 S	SOIL, ROW 6, SOUTH, 250-500 FT, WEST ROCKY BRANCH.	С		21 GRABS	01	TABLE KEY
WH2381	LI	.3 <b>U</b>			ng/sample	12-AUG-88	0 L	JOUID, HEXAME. EQUIPMENT RINSE.	C	ORI	NA	01	Q - Qualifier
WH2382	LI	.3 U			ng/sample	12-AUG-88	0 L	LIQUID, HEXAME, TRIP BLANK.	С	<b>GBL</b>	NA	01	U - Not Detected at stated concentration
WH2383	<b>\$</b> 0	.3 V		0-3 11	n. ppb	07-SEP-88	0 S	SOIL. GARDEN AT 2113 BRADEN.	D		6 grabs	01	T - To be reported in supplement to this report

359 records selected.

QC - Quality Control

QRI - Rinse QBL - Blank QRIG - Original QDU - Duplicate SPLT - Split QDM - Mix Check

Sample Status

01 - Rush 02 - Analyze (no rush) 01 - Hold

TABLE A-3

page I

TABLE A-3 JUL AND SEDIMENT SAMPLES COLLECTED AND SPLIT WITH EPA

SAMPLE Mumber	DATE Sampled	SAMP TYPE	SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE WATER OC	OC PARTNER	REFERENCE AREAS	UNITS IN COMPOSITE
MH1 379	30 - JUN-88	50	SDEL. 1510-2000 FT 6 IN ABOVE WATER. BOCKY BRANCH, WEST LEG LEFT GAME	0-3 1n	5 SPLT	M1375	A	50 CHARS
WH1391	01 - JUL-89	SE	SEDIMENT ROCKY BRANCH, WEST LEG AT VERTAC FENCE	grab	- 4 SPLT	MH1378	A	NA
MH1 399	03-JUL-88	<b>S</b> 0	SOLL, BAYOU METO 6 IN FROM WATER, RIGHT BANK	0-3 IA.	5 SPLT	MH1 398	J	50 GRABS
WH1413	04-JUL-88	50	SOIL, DRY CREEK SED. NEXT TO BOCKY. BRANCH, S OF REDWOND ROAD, EPA SPLIT	0-3 in	0 SPLT	WH1411	н	50 GRABS
MH1451	10- JUL-88	<b>S</b> 0	SOLU, 2510-2940 FT 6 IN ABOVE WATER, E ROCKY BRANCH LEFT BANK, EPA SPLIT	0-3 in.	5 SPLT	M(1449	4	37 GRABS
WH2028	11-JUL-80	SO	SOIL, OLD SLAUDGE DRYING BEDS OLD TREATMENT PLAN EPA SPLIT	0-3 an	Q SPLT	WH2026	EL	73 CRARS
WH2041	11 - JUL-88	50	SOIL ROW 1, WEST 500-750 FEET W ROCKY BRANCH, BPA SPLIT	0-3 in	0 SPLT	WH2039	с	48 CRABS
MH2047	11 - JUL -88	SE	SEDIMENT EAST ROCKY BRANCH AT 1704 HILL ROAD PROPERTY LINE EPA SPLIT	0-1 IU	- 25 SPL7	WH2045	В	NA.
WH209S	14- JUL-88	SO	SOIL ROW 1. MEST 2202 BRADEN EPA SPLIT	0-3 in	O SPLT	WH2092	с	49 GBARS
WH2105	15 JUL-88	<b>S</b> 0	SOIL ROW I. WEST 618 ALTA COVE. EPA SPLIT	0-3 in	O SPLT	WH2103	c	44 CRABS
₩12192	19 - JUL - 88	\$0	SOIL ROW I NORTH, 605 BROOKHAVEN COURT EPA SPLIT	0-3 in	8 SPLT	WM2198	c	14 CRARS
MH2211	21 - JUL -88	œ	SLUDGE EAST MALE OF MORTH OXIDATION FOND INTERFACE EPA SPLIT	0-3 in	-5 SPLT	<b>IH</b> 2209	GI	4 CORINGS
WH2223	22-JUL-88	SE	SLUDGE.S QUADRANT ABBATION BASIN TOP SEDIMENT/SLUDGE, EPA SPLIT	0-2 in	-12 SPLT	WH2222	F	6 GRABS
WH2231	22 · JUL -88	co	SLUDGE SOUTH QUADRANT AFRATION BASIN INTERFACE EPA SPLIT	0-1 1n	-15 SPLT	WH2229	f	6 CORINC
WN2239	23 JUL-88	S0	SOIL SOUTH, MANHOLE MANGER 2735 AT 617 DAKLEY, EPA SPLIT	0-3 tn	Ø SPLT	WH2238	c	35 GRABS
WH2248	25-JUL 68	50	SOIL, 2111 BRADEN SETNEEN PLANTS & HOUSE 4 FT. ON WEST SIDE EPA SPLIT	0-3 in	O SPLT	NH2247	B	MA
Wi2251	24 - JUL - 89	<b>S</b> 0	SOIL, ROW 3 WEST, 0-250 FT WEST ROCKY BRANCH, EPA SPLIT	0-3 to	0 SPLT	WH2258	c	SO GRABS
WH2265	25-JUL-88	SO	SOIL ROW 3, WEST, 500-750 FT WEST ROCKY BRANCH EPA SPLIT	0-3 IN	0 SPLT	WH2263	С	48 GRABS
WH2279	25 JUL-88	SO.	SOIL ROW 3 SOUTH 2112 WEST LANGE EPA SPLIT	0-3 IN	0 SPLT	WH2278	c	32 GRABS
WH2288	26-JUL-88	<b>S</b> 0	SOIL ROW 3 NORTH 2203 BRADEN EPA SPLIT	0-3 in	0 SPLT	WH2287	c	27 GRABS
<b>4</b> 12315	26 - JUL - 88	30	SOIL SOUTH MARKER NORTH OF DITCH, MANHOLE \$2745 1704 HILL, EPA SPLET	0-3 in	0 SPLT	WH2314	С	40 CRARS
WH2323	10 · AUG · 88	S0	SOIL ROW I. WEST 1704 HILL BOAD REVISED EPA SPLIT	0-3 Ln	û SPLT	WH2321	С	21 GRABS
MH2331	10 AUG-88	S0	SOIL, SOUTH 1704 HILL RD , MANHOLE #2745 DITCH EPA SPLIT REVISED	0-3 in	0 SPLT	WH2329	с	36 GRABS
H412.335	10-A8G-88	50	SOIL MORTH, \$704 HILL RD WORTH OF DITCH EPA SPLIT	0-3 in	0 SPLT	WH2334	С	24 GRABS
₩N2342	11 AUG-88	SE	SEDIMENT BAYOU METO AT STP OUTFALL EPA SPLIT	6-1 10	0 CDI T	NH2341	<b>G3</b>	10 CRARS

TABLE A-3
SOIL AND SEDIMENT SAMPLES COLLECTED AND SPLIT WITH EPA

SAMPLE Number	DATE Sampled	SAMP TYPE	SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE WATER		OC PARTNER	REFERENCE AREAS	UNITS IN COMPOSITE
WH2346	11 - AUG-88	SO	SOIL, BAYOU METO AT STP OUTFALL, 6 IN., RIGHT BANK, EPA SPLIT.	0-3 in.	(	SPLT	WH2345	<b>G</b> 3	26 GRABS
WH2350	11-AUG-88	<b>S</b> 0	SOIL. BAYOU METO AT STP OUTFALL. 36 IN LEFT BANK, EPA SPLIT.	0-3 in.	C	SPLT	VH2349	G3	26 GRABS
WH2356	11-AUG-88	<b>S</b> 0	SOIL. NORTHWEST. 1704 HILL ROAD. NORTH OF POOL. EPA SPLIT	0-3 in.	(	SPLT	WH2355	c	36 GRABS
WH2361	11-AUG-88	\$0	SOIL. SOUTH, 1712 HILL ROAD.MANHOLE MUMBER 2741, EPA SPLIT.	0-3 in.	C	SPLT	MH2360	c	35 GRABS
WH2364	11-AUC-88	<b>S</b> 0	SOIL, WEST, 1804 HILL ROAD, MANHOLE NUMBER 2740, EPA SPLIT.	0-3 in.	(	SPLT	WH2363	С	35 GRABS
WH2368	11-AUG-88	<b>S</b> 0	SOIL, DITCH IN BACKYARD OF 1712 AND 1804 HILL ROAD. EPA SPLIT.	0-3 in.	•	SPLT	WH2366	С	7 GRABS
MH2369	11-AUG-88	50	SOIL, DITCH BEHIND 1704 HILL ROAD, EPA SPLIT.	0-3 in.	C	SPLT	WH2371	С	10 GRABS

32 records selected.

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# APPENDIX B

# SUMMARY DATA REPORT FORMS

SEMI-ISOMER SPECIFIC TCDD

The following report forms for semi-isomer specific TCDD analyses are extracted from analytical reports prepared by TMS Analytical Services, Inc. See Tables A-1 and A-2 (Appendix A) for identification and description of samples. The complete reports of these analyses are located in Volume III.

FILE RECEIVED DATE: FILE RECEIVED TIME: SITE: MER CASE: 0706 DATE: 07/09/EB

 $\subset$ 

	CLIENT	ANALYSIS	NATIVE	SURROGATE	TCDO	REFUN	VALID	UNITS	COMMENTS
AREA F		DATE TI		ACC	COYC.	0005	CODE		
HETHBLE	ANI METHELAK	07/05/86	1923 0.13#	45.10	0.300 y			NS/6N	
SOILELA	NK OCL34E15	07/05/28	1935 0.05*	67.54	0.300 U			NG/6M	
SOLLSPI	IKE COL35590	07/05/88	1947 1.12	76.72	0.845			NG/GM	
SOIL PE	PE-A	07/05/98	1959 1.10	67.61	0.830			NS/SK	
1352	1352	07/05/BB	2010 0.68#	67.97	0.3CO U			NG/EM	
1354	1354								
1355	1355								
1361	1361								
1362	1342								
1367	1357								
1368	1368								
1374	1374								
1375	1375					•			
1377	1377								
1378		07/07/88	1059 0.94*	101.61	0.300 1			NG/GM	
	1378	V11V1108	1027 4.75	101-01	0.300 6			ROTOR	
1384	1384								
1385	1325				4 244 1			wa 184	
1392	1392	07/07/88	1200 1484		0.300 E			NG/GH	
1393	1393	07/07/68	1219 0.724		0.300 U			NG/GM	
1399	1398	07/07/EB	1229 0.42	103.08	0.300 1	)		NG/SH	

# QUALIFICATION FLASS:

- . 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
- \*\* SURPUBATE OUTSIDE OF ACCEPTABLE RANGE
- \*\*\* HIGH DETECTION LIMIT

#### RERUN CODES:

- A AUTOMATIC REPUN
- R REQUESTED REPUN

NOTE FROM HERCULES WITH AGREEMENT OF EPA RPM: Data for samples 1354, 1355, 1361, 1362, 1367, 1368, 1374, 1375, 1377, 1384 and 1385 have not been confirmed due to analytical difficulties and are therefore not reported here. The data will be reported in a supplement to the Report on Fine Grid Sampling Plan.

### GC/MS/MS MORKSMEET REPORT FORM

SITE: HER CASE: 0704

SURROGATE INTERNAL	CONC 0.0 STD CONC 1		RF NATIVE RF SURROGA	2.10 JE 7.0			: 1.009 TG H FACTOR:		CA	TE: 67/09	/88	
LAB SAMPLE #	AREA 4	CLIENT SAMFLE B	ANALYS DATE	SIS TIME	Sample Trucka	10H 257	10N 259	IDN 263	ION 268	RATIO 257/259	SURR ACC	RAN UNITS
JU_0643	METHBLANK	RETHBLIKK	07/06/88	1923	5.00	654	5120	141351	521065	6.13	65.10	0.003 KG/6%
307.0644	SGILBLANK	OCL 34615	07/06/88	1935	5.00	329	£891	. 142605	506754	0.05	67.54	0.011 NG/6H
JUL0645	SOILSPIKE	CCL35590	07/08/88	1947	5.00	151132	134632	251272	780941	1.12	76.72	0.845 KG/8M
JUL0646	SOIL PE	PE-A	07/06/88	1959	5.00	96494	87405	145066	511247	1.10	67.61	0.830 NS/6M
JUL0647	1352	1352	03/06/89	2010	5.02	4913	7217	119640	422138	0.68	67.99	0.045 RG/GM
JULOSAB	1354	1354										
1010649	1355	1355										
JUL0650	1361	1361										
JUL0651	1362	1362										
JUL0452	1367	1347										
JUL0653	1368	1368										
JUL0654	1374	1374										
1070922	1375	1375										
JUL0708	1377	1377										
JUL0709	1378	137B	07/07/88	1059	5.28	16815	17851	129547	305549	0.94	101.61	0.233 K9/8M
JUL0710	1384	1384										
JUL0714	1385	1385										
JUL0715	1392	1392	07/07/88	1200	5.11	148	i	62748	151212	149	99.59	-0.020 NG/6N
JUL6717	1393	1373	07/07/88	1219	4.92	2655	3700	121237	284092	0.72	102.40	0.031 NG/8M
<b>JUL0718</b>	1398	1398	07/07/88	1229	4.84	1173	2813	144516	336440	0.42	103.08	0.006 NB/65

NOTE FROM HERCULES WITH AGREEMENT OF EPA RPM: Data for samples 1354, 1355, 1361, 1362, 1367, 1368, 1374, 1375, 1377, 1384 and 1385 have not been confirmed due to analytical difficulties and are therefore not reported here. The data will be reported in a supplement to the Report on Fine Grid Sampling Plan.

#### TODO FUNAL DATA FEPDRE CHEET

FILE FECEIVED DATE: FILE RECEIVED TIME: SITE: PEC CASE: 07/6 DATE: 09/15/65

36E3 \$	CLIENT SAMPLE #	AVALYSIS DATE TIME	MATINE PATIN	SURROBATE ACC	TODO COMO.	PEPUN 2006	VALID BDDC	PTINU	COMMENTS
1353	1350	07/07/88 142	2 0.15*	102.62	0.300 U			NG/6M	UNITS OF HE FER EATFLE
1058	1358	07/07/88 143	2 1054	105.61	0.300 U			NG/68	UNITS OF NO PER SAMPLE
1442	1442	07/07/88 144	2 1.25+	103.85	0.300 4			46/6K	UNITS OF WE PER SAMPLE
KETHBLANK	METABLE2	07/07/23 145	(.31#	102.61	0.300 U			MB/BM	
SOTUBLANK	SOTLBLKZ	07/07/BB 150	1.00+	91.74	0.300 8			K6/6#	
- SCILEPIKE	SOTLSPK2	07/07/68 151	2 1.04	111.54	0.783			46/5M	
SOIL PE	SOIL PE2	07/07/88 152	1 1.02	104.69	4,048			NG/EM	

#### QUALIFICATION FLAGG:

- 257/259 RATIO GUTSIDE OF ACCEPTABLE FANSE
   SURSOSATE OUTSIDE OF ACCEPTABLE RANGE
- \*\*\* HIGH DETECTION LIMIT

# PERUN CODES:

- A AUTOMATIC PERUN
- R REQUESTED RERUN

#### BC/MS/MS WORKSHEET REPORT FORM

SITE: HER CASE: 0706 DATE: 07/20/68

LAB TAMPLE 1	AREA 1	CLIENT SAMPLE #	AHALYS DATE	IIS TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	IBN 268	RATIO 257/259	SUSR ACC	RAW ONITS VALUE
JUL0720	1353	1353	07/07/88	1422	0.04	722	4702	250632	609532	0.15	102.62	-0.223 NG/SH
48F0751	1358	1358	07/07/88	1432	0.04	135	1	136212	309553	135	105.61	-2.730 NE/6N
ULL722	1442	1442	07/07/88	1442	0.02	1300	1040	147866	341698	1.25	103.85	-1.661 NG/GM
JUL0723	METHELANK	METHBLK2	07/07/23	1451	5.09	865	2642	11707B	273807	0.31	102.61	0.009 NS/6M
JUL0724	SOILBLANK	SOILBLK2	07/07/98	1501	5.00	1	1	50337	131682	1.00	91.74	-0.023 NB/GN
<b>UL0725</b>	SOILSPIKE	SDILSPKZ	07/07/88	1512	5,00	23461	22611	63291	135633	1.04	111.54	0.783 NG:6M
JUL0707	SOIL PE	SBIL PE2	07/07/88	1521	5.00	18635B	183323	95926	215299	1.02	104.69	4.049 NG/6M

# TODD FINAL DATA REPORT SHEET

FILE RECEIVED DATE: FILE RECEIVED TIME: SITE: HEP CASE: 0706 DATE: 07/14/88

	CLIENT	ANALYSIS	NATIVE	SURROGATE	TCDD	RERUN	VALIB	UNITS	COMMENTS
AREA #	SAMPLE #	DATE TIME	PATIO	ACC	COME.	EDDE	CDDE		
METHELANK	METHOLNK	07/07/88 145	0.31+	102.61	0.300 U			NE/EM	
SOILBLANK	DCL34334	07/06/88 1501	1.00*	91.74	0.200 A			NE/SH	
SCILSPIFE	OCL35723	07/07/88 1513	1.04	111.54	0.783			NG/GM	
SDIL PE	PE-B	07/07/88 1521	1.02	104.69	4,048			NG/6%	
1401	1401	07/07/89 1538	0.50	100.23	0.300 8			NG/6%	
1404	1404	07/07/88 1545	1.27#	9B. 63	0.300 B			NG/GH	
1405	1405	07/07/88 155		102,83	0.300 fi			NG/SX	
1410	1410	07/07/88 1607	1.04	99.49	0.300 H			NG/GM	
1411	1411	07/07/88 1611		99.14	0.569			NG/GM	
1412	1412	07/07/88 182	1.07	100.03	0.489			NG/GM	
1414	1414	07/07/88 1646	0.85	101.24	0.300 U			NG/6M	
1415	1415	07/07/88 145	1.07	101.35	0.387			NG/GH	
1416	1418	07/07/86 170	2 747€	99.94	0.300 U			MB/6X	
1418	1418	07/07/88 1713	3 0.59=	102.18	0.300 N			NG/GH	
1421	1421	07/07/88 1737	7 1.00*	91.00	0.300 U			NG/GX	
1424	1424	07/07/88 1748	1.06	100.84	0.300 U			NE/SK	
1425	1425	07/07/88 1759	1.05	96.70	0.300 U			NG/SM	
1430	1430	07/07/88 180	1.05	89.73	0.872			NB/6H	
1431	1431	07/07/88 181	1.01	79.26	0.475			NG/GH	
1436	1436	07/07/88 183	1.11	99.83	0.300 U			NS/SM	
1437	1437	07/07/88 1840	90.1	95.80	0.632			NG/EX	
1443	1443	07/07/88 185	1.05	93.09	0.682			MG/GM	
1444	1444	07/07/88 1904	1.08	96.53	0.335			NG/GM	

#### QUALIFICATION FLAGS:

- 257/259 RATIO OUTSIDE OF ACCEPTABLE PANGE
   SURROGATE OUTSIDE OF ACCEPTABLE RANGE
   HIGH DETECTION LIMITY

- RERUN CODES: A AUTOMATIC REPUM R REQUESTED RERUN

#### BC/MS/MS MORKSHEET REPORT FORM

SITE: HER CASE: 0706 DATE: 07/14/68

SURROGATE CONC. 0.06 INTERNAL STD CONC. 1.05

JUL0746

1444

1444

07/07/88 1904

4.89

37960

35665

200999

498731 1.06

96.53

0.335 %5/6%

RF NATIVE 2,109 RF SURROGATE 2,081 ION RATIO: 1.009 TO 1.233 CORRECTION FACTOR: 0.010

PAW LAB CLIENT ANALYSIS SAMPLE IOM 257 ION 259 10H 263 10N 26B RATIO SURF UNITS SAMPLE & AREA & SAMPLE & DATE TIME AMBUNT VALUE 257/259 ACC HETHEL ANK HETHRUNK 07/07/88 1451 5.00 885 2842 11707R 273807 0.009 NG/EM JJII.0723 0.31 102. A1 JUL0724 **EGILBLANK** DCL34334 07/06/88 1501 5.00 50337 131482 91.74 -0.023 NG/6M 1 1.00 SOILSPIKE QCL35723 JUL0725 07/07/BB 1512 5.00 23461 22611 63291 135633 1.04 111.54 0.783 NG/GH JUL072& 07/07/88 1521 4.048 NG/6M SOIL PE PE-8 5,00 186358 183323 95926 215299 1.02 104.69 JUL0727 140t 1401 07/07/6B 1536 4.82 3098 6115 87078 213264 0.50 100.23 0.083 MS/6M JUL0728 1404 1404 07/07/88 1545 5.11 3035 2382 130234 0.017 NS/GM 316814 1.27 98.63 JUL0729 1405 1405 07/07/88 1557 5.33 2201 3073 105080 245207 0.026 NS/64 0.72 102.83 JUL0730 07/07/88 1607 1410 5.03 7801 7517 14527B 0.080 MG/SM 1410 350260 1.04 99.49 JUL0731 1411 1411 07/07/88 1618 4.83 35715 35161 121646 293535 1.02 99.14 0.559 NG/68 JUL0732 1412 1412 07/07/68 1629 4.96 13135 12299 49641 118757 1.07 100.03 0.489 NS/SK JUL0733 1414 1414 07/07/88 1849 4.99 9816 11604 105785 250527 0.85 101.24 0.180 NG/6M 2UL0734 1415 1415 07/07/88 1651 5.25 22460 20954 101540 239876 101.35 0.387 NG/6M 1.07 JUL0735 1416 07/07/88 1702 747 62598 -0.011 NB/6M 1416 4.89 150272 747 ı 99.96 JUL0736 1418 1418 07/07/88 1713 4.97 2482 4170 67353 0.077 NG/65 158137 0.59 102,18 JUL0738 1421 1421 07/07/BB 1737 3202 65368 5.01 3200 172307 1.00 91.00 0.065 N6/6K JUL0739 [424 07/07/68 4260 164640 0.030 NE/SM 1424 1748 5.04 4531 391747 1.06 100.84 JUL0740 07/07/88 200054 1425 1425 1758 4.94 12720 12160 496149 1.05 96.70 0.097 NG/GM JUL0741 1430 1430 07/07/88 1808 4.99 75984 72140 147933 393222 1.05 89.73 0.872 NG/SM JUL0742 1431 1431 07/07/88 1819 4.87 36662 36239 147733 356229 1.01 99.26 0.475 NG/6M JUL0743 1436 4.85 1474 07/07/88 1830 22213 19926 146666 352024 99.83 0.269 ME/65 1.11 JUL0744 1437 1437 07/07/B9 1842 4.92 52700 48536 152084 377584 1.09 95.80 0.432 N9/68 JUL0745 07/07/88 1853 1443 1443 5.12 39084 37063 97561 250452 1.05 93,09 0.682 NE/6M

#### TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE: FILE RECEIVED TIME: SITE: HEP CASE: 0708 DATE: 07/18/88

AREA #	CLIENT SAMPLE #	ANALYSIS DATE TIP		SURROGATE ACC	TCDD COMC.	RERUN Code	VALID CODE	UNITS	COMMENTS
METHBLANK	METHBLAK	07/08/68	1708 0.96*	83.70	0.300 8			NG/EM	
SOILBLANK	OCL34334		1719 0.00*	71.23	0.300 U			NG/GM	
SCILSPIKE	OCL35590		1730 1.11	96.48	0.833			NG/GH	
SOIL PE	PE-A	07/08/88	1744 1.14	83, 29	0.811			NE/SK	
1446	1446	07/08/88	1755 0.00#	82.89	0.300 U			NG/GK	
1448	144B	07/08/88	1805 0.00#	92.71	0.300 U			NG/GM	UNITS OF NO PER SAMPLE
1452	1452	07/08/88	1815 1.03	83.73	0.300 U			NG/GK	
1453	1453	07/08/99	1826 1.09	79.13	0.300 U			NG/GM	
1454	1454 .	07/08/83	1837 1.04	86.36	0.300 U			NG/GH	
1455	1455	07/08/88	1848 L.II	84.63	0.300 U			HG/SK	
1459	1459	07/08/88	1859 0.00€	83.28	0.300 U			NG/EM	
1460	1460	07/08/88	1910 0.57*	87.05	0.300 U			NG/GX	~
1461	1461	07/08/88	1920 0.65#	84.39	0.300 U			NG/GK	
1462	1452	07/08/88	1932 2.40#	82.24	0.300 U			NG/SM	UNITS OF NG PEP SAMPLE

#### QUALIFICATION FLAGS:

- . 257/259 RATIO DUTSIDE OF ACCEPTABLE RANGE
- \*\* SURROGATE OUTSTOE OF ACCEPTABLE RANGE
- \*\*\* HIGH DETECTION LIMIT

# REAUN CODES:

- A AUTOMATIC RERUN
  R REQUESTED RERUN

HERCULES INCORPORMED RECEIVED

JUL 25 1988

B-7

MEDICAL DEPARTMENT

# GC/MS/MS MORKSHEET REPORT FORM

SITE: HER CASE: 0708 DATE: 07/18/68

SURROGATE CONC 0.06 INTERNAL STD CONC 1.05 RF NATIVE 2.109 RF SURROBATE 2.083 IGN RATIO: 1.009 TO 1.233 CORPECTION FACTOR: 0.010

AMPLE (	AREA #	CLIENT SAMPLE #	ANALYS DATE	sis Time	SAMPLE AMOUNT	ION 257	ION 259	10N 263	ICN 268	RATIO 257/259	SURR ACC	PAN UNI VALUE	273
7UL0838	METHELANK	HETHBLAK	07/08/88	1708	5.00	2154	2201	162621	466203	9.98	83,70	-0.001 NG/68	4
UL0839	SOILBLANK	OCL34334	07/08/98	1719	5.00	1	1914	94783	319356	0.00	71.23	-0.009 N6/SI	
JUL0840	SOILSPIKE	DCL35590	07/08/88	1730	5.00	65332	59047	139218	344544	1.11	94.48	0.833 NG/6	
JUL0841	SOIL PE	PE-A	07/08/88	1744	5.00	107299	94272	199974	572914	1.14	83.29	0.811 NG/61	
UL0842	1446	1446	07/08/88	1755	5.04	t	924	100360	290595	0.00	82.89	-0.015 NG/6	
JUL0843	1448	1448	07/08/88	1805	1.00	1	771	307057	890939	0.00	82.71	-0.104 NB/8	
JUL0844	1452	1452	07/08/88	1815	5.04	6337	6150	137454	393784	1.03	83.73	0.052 NG/67	
UL0845	1453	1453	07/08/88	1925	5.03	15377	14066	B3541	252865	1.09	79.13	0.252 NB/S	
VL0846	1454	1454	07/08/88	1837	5.04	12492	12060	87656	2#3238	1.04	84.36	0.215 NG/67	
JUL0847	1455	1455	07/08/88	1848	5.03	16091	14488	87479	247592	1.11	84.63	0.268 NS/S/	
10L0848	1459	1459	07/08/98	1859	5.09	1	1065	66358	191229	0.00	83.28	-0.009 NG/GF	
UL0849	1460	1460	07/08/89	1910	5.05	2278	3963	78328	215880	0.57	87.05	0.045 NG/ER	
JUL0850	1461 -	1461	07/08/88	1920	5.02	780	1504	74514	211877	0.65	84.37	0.005 NG/SH	
181,0651	1462	1462	07/08/88	1932	1.00	1823	701	234710	684959	2.60	82.24	-0.071 NB/S	

#### TCDD FINAL DATA FEPORT SHEET

FILE RECEIVED DATE: FILE RECEIVED TIME:

SITE: HER CASE: 0712 DATE: 07/16/68

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	CLIENT	ANALYSIS	NATIVE	SURROGATE	TCBO	REPUN	VALID	UNITS	COMMENTS
AREA #	SAMPLE ₽	DATE TIME	RATIO	ACC	CENC.	CODE	CODE		
KETHOLANK	METHBLMK	07/13/88 0750	1.00+	80.89	0.300 U			NG/GK	
SDILBLANK	BCL34373	07/13/88 0801	1.004	6B.40	0.300 U			NG/6M	
SCILSPIKE	OCL35612	07/13/BB 0813	1.12	80,42	0.804			NG/GM	
SQIL PE	PE-A	07/13/88 0824		72.40	0,792			NG/GM	
KH1449	WH1449	07/13/88 0835		70.83	0.304			46/6M	
WH1450	WH1450	07/13/88 0846		74.02	0.300 U			WG/EM	
WH1466	WH1466	07/13/88 0904	1.13	75.14	0.300 U			46/6M	
WH1467	WH1467	07/13/88 6919		70.18	0.300 U			NG/EM	
WH145B	WH146B	07/13/88 0934	1.18	74,76	0.300 U			MG/EM	
WH1469	WH1469	07/13/88 0948		77.20	0.300 U			KG/GM	
WH1471	WH1471	07/13/99 1001	1.00#	77.49	0,300 U			NS/SM	
WH1474	WH1474	07/13/88 1011	1.11	78.10	3.309			NG/EM	
WH1475	HH1475	07/13/88 1021	1.15	77.17	0.300 H			NG/GM	
WH1476	XH1474	07/13/88 1033	0.52*	77.66	0.300 U			NG/GM	
NH1490	WH1 480	07/13/88 1043	0.49#	77.49	0.300 U			NG/GM	
WH1481	WH1481	07/13/88 1053	0.17#	78.47	0.300 U			NS/SM	
WH1482	NH1482	07/13/88 1104	1.00#	80.29	0.300 N			NG/GK	UNITS OF NG PER SAMPLE
WH1483	NH1483	07/13/8B 1114	1.00≠	78,58	0.300 U			NG/SM	
WH1490	WH1 490	07/13/88 1124	1.00#	77.74	0.300 8			NS/GN	
WH1491	WK1491	07/13/88 1248	1.00+	88.33	0.300 U			NG/GM	
WH1492	WH1492	07/13/88 1341	1.00*	73.87	0.300 U			NG/GM	
WH1493	WH1493	07/13/88 1308	1.00#	89.92	0.300 U			NG/6M	
MH1494	HH1474	07/13/88 1354	1.00*	84,41	0.300 8			NG/6M	
WH:495	NH1495	07/13/88 1326	0.70#	78.11	0.300 U			NG/GH	

#### QUALIFICATION FLAGS:

- \* 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE \*\* SURPOGATE OUTSIDE OF ACCEPTABLE RANGE \*\*\* HIGH DETECTION LIMIT

- RERUM CODES: A AUTOMATIC RERUM
- R REQUESTED REAUN

# SC/MS/MS HOPKSHEET REPORT FORM

SITE: HER CASE: 0712 DATE: 07/18/88

SURROSATE CONC 0.06 RF NATIVE INTERNAL STD CONC 1.05 PF SURROSATE

RF NATIVE 2.109 ION RATIO: 1.009 TO 1.233
PF SURROGATE 2.083 CORRECTION FACTOR: 0.010

LAB		CLIENT	ANALY:		SAMPLE	10N 257	ICM 259	104 263	ION 268	RATIO	SURR	RAM	UNITS
SAMPLE 1	AREA #	SAMPLE #	DATE	TIME	AHOUNT					257/259	ACC	VALUE	
JUL 1302	METHBLANK	HETHBLNK	07/13/88	6750	5.00	1	1	46240	137196	1.00	80.89	-0.023	NG/SM
JUL 1303	SOILBLANK	DCL34373	07/13/68	0861	5.00	1	1	55923	199725	1.00	68.40	-0.023	NG/GK
JUL 1304	SOILSPIKE	OCL35612	07/13/88	0813	5.00	54862	49039	100144	297090	1.12	80.42	0.806	NG/GM
JUL 1305	SDIL PE	PE-A	07/13/88	0824	5.00	25993	22877	43163	142146	1.14	72.40	0.792	NG/GM
JUL 1306	MH1447	HH1449	07/13/88	0835	5.18	19192	18345	78172	284189	1.05	70.B3	0.304	NG/GM
JUL 1350	WH1450	WH1450	07/13/88	0848	5.22	9877	9046	45626	147595	1.09	74.02	0.269	NG/GM
JUL1307	WH1466	WH1466	07/13/88	0904	5.04	20170	17905	91702	292211	1.13	75.14	0.284	NG/GM
JUL1308	WH1 467	WH1467	07/13/88	0919	5.03	9476	8156	63795	217824	1.16	70.18	0.168	NS/GN
JUL1309	WH1468	KH1468	07/13/88	0934	5.04	7314	6196	46141	147874	1.18	74.76	0.192	KG/GH
JUL1369	WF?1469	WH1469	07/13/88	0748	5.14	B431	7790	61251	190140	1.08	77.20	0.175	NG/6M
JUL1310	WH1471	WHE 47 L	07/13/88	1001	5.29	1	1	54159	173939	1.00	77.49	-0.022	NG/GM
JUL1311	WR1474	XH1474	07/13/88	1011	5.25	159362	143536	68556	205371	1.11	78.10	3.309	NG/GM
JUL1312	WH1475	WH1475	07/13/88	1021	5.22	1469B	12820	127464	395907	1.15	77.17	0.136	NG/GM
JUL1313	WH1476	KH1 476	07/13/88	1033	5.09	1458	2827	69584	215007	0.52	77.66	0.024	NG/GM
JUL1314	WH1480	WH1480	07/13/88	1043	5.08	3302	4780	84249	260815	0.69	77.49	0.050	NG/6N
JUL1315	WH1481	WH [ 481	07/13/88	1053	5.0B	552	3344	68752	209727	0.17	78.47	0.021	NG/6H
FUL1316	NH1482	WH1482	07/13/88	1104	1.00	1	1	95415	285217	1.00	80,27	-0.114	NG/BM
JUL1317	WH1483	WH1483	07/13/88	1114	5.06	1	1	27242	83200	1.00	78.58	-0.023	NS/BH
JUL 1318	WH1490	MH1490	07/13/88	1124	5.27	1	1	46933	144898	00.1	77.74	-0.022	MG/GM
JUL1319	NH1491	WH1491	07/13/BB	1248	5.18	1	l	59337	161224	1.00	88.33	-0.022	NE/EX
JUL (324	MH1492	WH1492	07/13/88	1341	5.24	1	1	34988	113679	1.00	73.87	-0.022	NG/6M
JUL1321	WH1 493	HH1493	07/13/88	1308	5.03	1	1	16327	43579	1.00	89.92	-0.023	NG/SK
JUL 1325	WH:494	NH1494	07/13/88	1354	5.15	1	1	21950	62413	1.00	84.41	-0.022	NG/GM
JUL1323	MH1495	NH1495	07/13/98	1328	5.04	4089	5860	111623	342832	0.70	78.11	0.045	NG/6H

#### TODD FINAL DATA REPORT SHEET

FILE RECEIVED DATE: FILE RECEIVED TIME:

SITE: HER CASE: 0712 DATE: 07/18/88

AREA #	CLIENT SAMPLE #	AMALYSIS DATE TIME	NATEVE RATIO	SURPOGATE ACC	TCDD CONC.	RERUN Code	VALID CODE	UNITS	COMMENTS
METH8LANK	HETHOLINK	07/14/88 1800	1.004	93.25	0.300 U			NG/GM	
SOILBLANK	DCL34648	07/14/88 1623	1.00=	89.96	0.300 U			NG/GH	
SOILSPIKE	QCL35568	07/14/88 1633	1.03	103.10	0.896			NG/SM	
SOIL PE	PE-B	07/14/88 1643	1.08	91.43	4.016			NG/5H	
WH1496	HH1496	07/14/68 2319	0.604	84.07	0.300 U			NG/SM	
WH1497	WH1497	07/14/88 1708	4.21+	92.76	0.300 U			NG/SM	
WH1498	WH149B	07/14/88 1721	0.00*	94.42	0.300 U			NG/6H	
MH1499	WH1499	07/14/88 2257	1.00*	89.22	0.300 8			NS/SK	
WH2000	NH2000	07/14/88 1739	1.00#	92.70	0.300 U			NG/GM	
WH2004	WH2004	07/14/88 1749	1.30#	97.99	0.300 U			NG/EM	
WH2005	WH2005	07/14/88 1801	1.14	87.68	0.300 #			NG/GM	
WH2006	WH2006	07/14/88 1813	1.02	91.43	0.300 U			NG/GM	
WH2010	WH2010	07/14/88 1826	1.00*	93.63	0.300 U			MG/6M	UNITS OF NB PER SAMPLE
WH2015	WH2015	07/14/88 1836	1.00*	91.20	0.300 U			NS/GH	
₩H2016	WHZ016	07/14/88 1849	1.03	88.2t	2.159			NG/GM	
WH2017	NH2017	07/14/88 1907	1.00#	89.53	0.300 U			MS/GM	UNITS OF NG PER SAMPLE
NH2023	MH2023	07/14/BB 2151	1.03	93.64	2.138			ME/EM	
WH2024	WH2024	07/14/88 2307	1.14	82.47	0.300 U			NG/GH	
WH2025	WH2025	07/14/68 2203	1.09-	83.33	2.172			NG/GM	
WH2026	NH2026	07/14/88 2214	1,06	82.76	4.750			NG/GH	
WH2027	WH2027	07/14/88 2225	1.12	84.82	2.843			WG/6M	
WH2029	WH2029	07/14/88 2235	1.12	83.73	0.970			NG/EN	
MH2020	MH2030	07/14/88 2246	1.01	83.30	0.307			NG/8H	

# QUALIFICATION FLAGS:

- . 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
- \*\* SURROGATE DUTSIDE OF ACCEPTABLE RANGE
- \*\*\* HIGH DETECTION LIMIT

- RERUN CODES: A AUTOMATIC RERUN
- R REQUESTED RERUN

#### SC/MS/MS WORKSHEET REPORT FORM

SITE: HER CASE: 0712 -

DATE: 07/19/69

SURROBATE CONC 0.06 INTERNAL STD CONC 1.05 RF NATIVE 2.109 RF SURROBATE 2.083 ION RATIO: 1.009 TO 1.233 CDRRECTION FACTOR: 0.010

		0) 15119	PMA: W		0.4NO. P	100 000	100 000					****	
LAB SAMPLE #	AREA #	CLIENT SAMPLE #	ANALY Date	TIME	SAMPLE AMOUNT	ION 257	ION 259	10N 263	ION 268	RATIO 257/259	SURP ACC	RAW VALUE	UNITS
JUL1416	METHBLANK	METHOLNK	07/14/88	0061	5.00	t	1	212409	546673	1.00	95.25	-C.023	NG/GH
JUL 1417	SOTLBLANK	DCL34648	07/14/89	1623	5,00	1	1	136027	362911	1.00	89.96	-0.023	NG/64
JUL1418	SOILSPIKE	OCL35588	07/14/88	1633	5.00	52046	50371	114036	264147	1.03	103.10	0.896	NG/EM
JUL1419	SOIL PE	PE-8	07/14/88	1643	5.00	407764	376653	179854	460543	1.08	91.43	4,016	NG/EM
JUL1443	WH1476	WH1496	07/14/88	2319	5.01	1839	3078	119423	340878	0.40	84.07	9.011	NG/EM
JUL 1421	NH1497	WH1497	07/14/80	1704	4.68	1983	471	92002	237992	4.21	92.76	0.002	N5/611
JUL1423	WH1498	BPF1##	07/14/88	1721	5.15	1	1810	5961B	151546	0.00	91.42	0.005	NG/SM
JUL1441	WH 1499	4H1499	07/14/88	2257	4.84	ı	1	61650	167716	1.00	50.22	-0.024	NG/GM
JUL1425	WH2000	WH2000	07/14/88	1739	5.14	1	1	49767	128845	1.00	92,70	-0.022	NG/GM
JUL1426	WH2004	XH2004	07/14/88	1749	4.99	1	1	17754	43485	1.00	97.99	-0,623	N6464
JUL1427	MH2002	WH2005	07/14/88	1801	4.97	819B	8020	72657	194178	1.14	89.6E	0.168	NG/GM
JUL 1428	MH2006	NH2006	07/14/88	1813	5.17	13841	13543	133451	349912	1.02	91.43	0.157	NG/GM
JUL1429	WHZ010	WH2010	07/14/88	1824	1.00	1	1	110767	283937	1.00	93.63	-0.114	NG/GM
JUL1430	WH2015	WHZ015	07/14/88	1836	5.03	1	1	150734	396654	1.00	91.20	-0.023	N6/6H
JUL1431	MH2016	¥H2016	07/14/88	1849	4.83	115501	111882	95147	255477	1.03	88.21	2.159	NG/GM
JUL1432	WH2017	WH2017	07/14/88	1907	1.00	1	1	244060	654209	1.00	69.53	-0.114	NG/GM
JUL1434	WH2023	NH2023	07/14/88	2151	5.06	39297	38079	33168	83919	1.03	93.64	2.138	NG/EM
JUL1442	WH2024	WH2024	07/14/88	2307	4.97	12157	10563	106653	309997	1.14	82.47	0.153	NG/EM
JUL1435	WH2025	NH2025	07/14/88	2203	4.B2	34570	31839	26203	74394	1.09	63.33	2.172	NS/G1
JUL1436	HH2026	WH2026	07/14/68	2214	4.87	94550	89276	33348	93746	1.06	92,76	4,750	MG/6M
JUL1437	WH2027	WH2027	07/14/88	2225	5.03	49386	43949	27667	76774	1.12	84.82	2.843	N6/6M
JUL1438	WH2029	NHZ029	07/14/88	2235	5.01	109729	97559	173467	493829	1.12	83.73	0,970	NE/EM
JUL1440	¥H2030	WH2030	07/14/88	2246	5.12	7187	9090	44715	128544	1.01	83.30	0.307	NG/EM

# TODO FINAL DATA REPORT SHEET

FILE RECEIVED DATE: FILE RECEIVED TIME: SITE: HER CASE: 6712 DATE: 67/18/88

	CLIENT	ANALY 3	18	NATIVE	SURFOGATE	TCOD	REPUN	VALID	UKITS	COMMENTS
APEA B	SAMPLE F	DETE T	361	RATIO	933	CONC.	COLE	3303		
PETHELANK	NETHBLNA	07/15/88	0027	0.18*	91.45	0.300 U			NE/SX	
SOILBLANK	DCL34621	97/15/83	(-915	1.00#	75.93	0.300 U			Na/an	
SCILSFIKE	GCF32240	07/15/65	0926	1.08	90.29	0.841			NG/6M	
301L PE	PE-A	07/15/89	0939	1.08	77.22	0.755			NE/GM	
982031	WH2031	97/15/68	0949	1.09	65.60	2,889			NG / GM	
WH2032	¥42032	07/15/88	:001	1.09	74.69	2.958			NS/6M	
SH2033	WH2033	07/15/68	1014	1.09	75.62	2.716			NG/EM	
MH2037	WH2037	07/15/88	1025	1.11	78.13	1.246			N3/6K	
MH2038	WH203B	07/15/89	1038	1.11	75.87	1.826			MS/6K	
W12039	WH2039	07/15/89	1049	1.05	76.31	1.30B			NG/GM	
MH2040	WH2040	07/15/88	1100	1.18	74.75	1.650			NG/6H	
NH2045	¥H2045	07/15/88	1110	0.45#	78.23	0.300 ម			NS/SM	
W.42046	WH2046	07/15/88	1121	0.05#	80.59	0.300 H			NS/SH	•
#H204B	NH2048	07/15/88	1135	0.23#	79.81	0.300 1			KS/GM	UNITS OF NO PER SAMP

#### QUALIFICATION FLAGS:

- . 257/259 RATIC OUTSIDE OF ACCEPTABLE RANCE
- \*\* SURFOGATE OUTSIDE OF ACCEPTABLE PANGE
- \*\*\* HIGH DETECTION LINIT

# REPUN CODES:

- A AUTOMATIC RERUN
- R REQUESTED RERUN

# SCHRAMS WORKSHEET REPORT FORM

SITE: PER CASE: 0712 DATE: 07/16/89

LAS SAMPLE &	AREA #	CLIENT SAMPLE #	ANALYS DATE	IS TIME	SAMPLE AMCUNT		:ON 259	ION 263	10N 288	RATIO 257/259	SUPP ACC	PAN VALUE	û#[13
JUL 1446	METHBLANK	METHBLNK	97/15/98	0027	5.00	466	2676	320056	942976	0.18	€1.46	-0.015	NG/GM
JUL1502	SOILBLANK	OCL 34621	07/15/68	0915	5.00	1	1	46670	140125	1.00	79.93	-0.023	NB/38
JUL1503	SCILSPIKE	DCL35590	07/15/88	0926	5.00	198592	163378	396375	1047986	1.08	90.29	0.941	NG/GH
JUL1504	SOIL PE	PE-A	67/15/88	0939	5.00	60716	74704	153292	473741	1.05	77,22	0.755	NS/SH
JUL 1505	WH2031	#F2031	07/15/88	0949	4.38	742875	691093	332671	1187696	1.09	65.67	2,389	NE/GM
JUL1506	NH2032	HH2032	07/15/88	1001	4.22	192894	178485	97863	306308	1.08	74.89	2.953	NG/GM
JUL1507	MH2033	¥H2033	07/15/68	1014	4,93	227304	209208	122931	392355	1.09	75.62	2,715	KS/6M
JUL1508	kH2037	HH2037	07/15/88	1025	4.94	30291	27368	35822	105030	1.11	78.13	1.746	N3/8M
JUL1509	NH2038	NH2038	07/15/88	1038	5.00	109047	98173	85185	285731	1.11	75.87	1.825	NS/GM
JUL 1510	MH2039	NH2039	07/15/88	1049	4.86	62509	58795	71376	222342	1.06	76.31	1.308	NB/SM
JUL1511	WH2040	NH2040	07/15/88	1100	5.16	42395	35826	33934	107492	1.1B	74.75 -	1.450	NG/6#
JUL1512	VH2045	kH2045	07/15/89	1110	4.88	130B	2937	86135	264193	0.45	78.23	0.016	NG/GM
JUL 1513	WH2046	WH2046	07/15/88	1121	4,97	122	2404	98284	292674	0.05	80.59	-0.602	NS/SN
JUL1514	WH2048	WH2048	07/15/68	1135	1.00	850	3495	276287	830608	0.23	79.81	-0.050	NG/SM

#### TODO FINAL DATA REPORT SHEET

FILE RECEIVED DATE: FILE RECEIVED TIME: SITE: HEP CASE: 0714 DATE: 07/16/EB

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	CLIENT	ANALYSIS	NATIVE	SUF POBATE	TCDD	REPUN	VALID	UNITE	COMMENTS
AREA #	SAMPLE #	DATE TIME	FATIO	ACC	CONC.	CODE	COCE		
METHBLANK	METHSLNI	07/15/88 114	14914	75.69	0.300 U			NG/6M	
SDILBLANK	OCL34394	07/15/6B 115	5 1.00±	90.69	0.300 U			NG/6H	
SOILSFIKE	OCL35514	07/15/58 120	7 1.21	92.78	0.774			NG/SM	
SOIL PE	PE-A	07/15/89 121	8 1.08	83.05	0.761			NG/GM	
¥42049	WH2049	07/15/BB 122	9 1.00*	81.10	0.300 8			NG/EM	
#H2050	WH2050	07/15/BB 123	9 1.00*	83.92	0.300 U			M6/GM	
#H2051	WH2051	07/15/88 124	9 1.00+	82.02	0.300 U			NG/EM	
MH2052	H-12052	07/15/88 125	9 0.28*	80.76	0.300 9			NG/SM	
W42053	NH2057	07/15/88 101	0 1.14	79.53	0.412			NS/EM	
WH2054	9H2054	97/15/68 132	0 1.05	80.05	0.729			NS/6H	
kH2055A	NH20554	07/15/88 133	2 1-11	89.54	0.857			NG/GM	
##2056B	HH20569	07/15/88 134	3 1.13	82.52	0.820			NG/GM	
¥820570	¥420570	07/15/68 135	4 1.05	81.91	1.195			NG/GM	
MH2058D	#H20589	07/15/68 140	5 1.04	E2.48	1.172		-	NS/EN	
#H2059	MH2059	07/15/88 141	4 1.07	81.57	0.922			NG/EM	
¥H2062	WH2062	07/15/88 142	4j0.0 ĕ	84.33	0.300 ป			NG/GM	UNITS OF MS PER SAMPLE
¥H2064	NH2964	07/15/88 143	E 1.094	79.88	0.300 8			NG 'GM	
WH2065	N42065	07/15/88 144	8 0.43+	86.35	0.300 U			NG/6M	
WH2066	WH2066	07/15/88 150	0 [.04	83.39	0.300 U			NG/6M	
₩H2067	NH2067	07/15/89 151	1 0.86#	80.55	0.300 U			NG/GM	
MH295E	WH2068	07/15/88 152	3 1.11	61,22	0.300 U			NG/6M	
NH2072	WH2072	07/15/88 153	5 1.00≇	79.E7	0.300 U			NG/GR	UNITS OF NO FER SAFFLE

#### PUALIFICATION FLASS:

- \* 257/259 RATIO DUTSIDE OF ACCEPTABLE PANGE
- \*\* SURROBATE DUTGIDE OF ACCEPTABLE BANES
- \*\*\* HIGH DETECTION LIMIT

# REPUN CODES:

- A AUTOMATIC RERUN
- F REDUESTED REALN

# GC/MS/MS MOSKSHEET REPORT FORM

SITE: HER CASE: 0714 DATE: 07/16/68

| 1974 | 1974 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 |

					BAURI P	144 553	100 000					****	
LAS SAMPL	E # AREA #	CLIENT SAMPLE #	AMALY: DATE	TIME	SAMPLE TRUCKA	16H 257	10N 259	IOM 263	10N 268	RATIO 257/259	SU <sup>rr</sup> ADS	RAW VALUE	UNITS
JUL 15	15 METHBLANK	METHBLINK	07/15/88	1145	5.00	1491	1	12472	37495	1491	75.69	0.057	NG/68
30L15	16 SOILBLANK	OCL34184	07/15/68	1155	5.00	1	1	17030	45065	1,00	90.65	-9,023	ME / EM
JUL 15	17 SOILSPIKE	OCL35514	17/15/68	1207	5.00	15334	12720	32416	83421	1,21	92,78	0.774	NG/GK
30115	18 SOIL PE	FE-A	07/15/88	1213	5.00	37949	35243	77003	221350	1.06	63.05	0.761	NE/EM
300.15	19 WH2G49	WH2049	07/15/98	1229	5.05	1	1	141271	418044	1.00	81.10	-0.023	NS/SK
JUL15	20 WH2050	WH2050	07/15/88	1239	5.04	1	ī	68217	195094	1.00	83.92	-0.023	H6755
JULIS	21 942051	442051	07/15/98		5.07	1	ī	110739	324027		82.02	-0.023	
391.15	22 #92052	WH2052	07/15/88	1259	4.90	441	1604	120104	356905	0.28	80.76	-0,009	
JULIS	23 WH2053	WH2053	07/15/98	1310	4.89	12714	11332	44855	134936	1.14	79.53	0.412	
20L15		WH2054	07/15/88		5.16	53210	50741	106779	318432	1.05	64.05		NB/68
JUL 15	25 WH2055A	MH2055A	07/15/88	1372	5.09	46812	42298	79725	236074	1.11	80.54	0.857	
160,15		NH2056B	07/15/68		5.04	32969	29197	60043	173602	1.13	92,52		NB/SK
JUL 15		W42057C	07/15/88		4.88	28485	26481	38490	110521	1.08	82.71		NS/EM
JUL 1		MH2058D	07/15/68		4.B9	6106B	58715	B4161	.242959	1.04	B2.4E		NB/B#
JULIS		NH2057	07/15/88		5.11	109646	102528	178499	521730	1.07	81.57		NG/GX
JULIS		WH2042	07/15/89		1.00	71	2335	162355	452070	0.01	84.33	-0.054	
JULIS		WH2064	07/15/63		5.07	ï	1	45276	136037	1.00	79.E8	-0.023	
JULIS		HH2065	07/15/88		5,05	581	1340	13734	35138	0.43	86.30	0.096	
JULIS		WH2066	07/15/89		4.97	20685	19717	175839	505398	1.06	93,39		MC/BM
39015		HH2067	07/15/88		5.01	14964	17006	207711	615293	0.88	80.95		NG-6M
2UL 13		WH2068	07/15/82		5,14	11542	10500	127784	377185	1.11	81,22		MB/BM
JULIS		WH2072	07/15/88		1.00	1	1	71473	215777	1.00	79,97	-0.114	

#### TODO FINAL DATA REPORT SHEET

FILE RECEIVED DATE: FILE RECEIVED TIME: 317E: HER CASE: 0715 DATE: 07/18/88

	01.75117			austrate	7000	0001111			
	CLIENT	ANALYSIS	NATIVE	SURROGATE	TODD	RERUN	VALID	UNITS	COMMENTS
APER #	SAMPLE #	DATE TIME	PATIO	ACC	CONC.	CODE	CGDE		
ETHBLANK	HETHBUNK	07/18/88 09:	4 0.12*	63.69	0.300 8			NG/6X	
BOILBLANK	OCL34373	07/18/85 093	6 0.00*	79.62	0.300 0			MS - SM	
DILBPIKE	DEL35514	07/18/88 093	1.08	87.57	0.812			NS/GH	
OIL PE	PE-A	07/18/88 094	B 1.05	75.97	0.812			NB/BM	
H1479	WH1479	07/18/88 09:	9 1.09	81.54	0.300 U			NS/EM	
H2073	¥R2073	07/18/88 10:	1 1.16	75.90	0.546			NS/EN	
H2074	NH2074	07/18/89 10:	23 1.14	79.31	0.300 H			NG/EN	
H2075	₩H2075	07/18/68 10	5 1.07	76.03	0.300 U			NG/SM	
H2079	WH2079	07/18/88 10:	1.00±	74.91	0.300 H			NG/SM	
P2050	MH2080	07/18/88 103	9 1.12	75.13	3.49B			NG/GM	
12081	¥H20B1	07/18/88 11:	1.08	70.46	4.313			NG/68	
42082	WH2082	(7/18/88 11)	22 1.01	82.50	3.528			NB/6H	
12096	KH2086	07/18/88 113	3 1.10	77.54	2.329			NG/GM	
H20B7	WH2087	07/16/6B 114	6 1.07	74.08	1.911			NG/GM	
H2088	MH2088	07/18/88 115	6 1.08	74.22	2.497			NG/6H	
H2092	₩H2092	07/18/88 12	7 1.12	77.44	1.727			NG/6M	
12093	WH2093	. 07/18/88 12	7 1.07	75.47	1,443			NG/GM	
12094	WH2094	07/18/88 12	7 1.12	75.85	0.922			K9/68	
12101	WH2101	07/18/88 12:		75.60	0.300 U			NG / GM	UNITS 0
H2102	WH2102	07/18/88 12	18 0.38+	75.45	0.300 U			NS/GH	UNITS O

## QUALIFICATION FLAGS:

- . 257/259 RATIO OUTSIDE OF ACCEPTABLE RANSE
- \*\* SUPROGATE QUISIDE OF ACCEPTABLE RANGE
- \*\*\* HIGH DETECTION LIMIT

### PERUN CODES:

- A AUTOMATIC RERUN
- R REQUESTED RERUN

#### BO/MS/MS WORKSHEET REPORT FORM

SITE: HER CASE: 0715 DATE: (7/15/68

SUPPOSATE CONC. 0.06 FF NATIVE 2,109 ION RATIO: 1.009 TG 1.213 INTERNAL SID CONC. 1.05 RF SUPPOSATE 2,083 CORRECTION FACTOR: 0.010

LAP ANALYSIS CLIENT SAMPLE 10N 257 10N 259 10N 263 10N 26B PATID 51'55 STIPU MAR SAMPLE & AREA & SAMPLE & EATE TIME AMOUNT 257/259 400 VALUE KETHBLANK METHBLAN 318 1807 07/18/68 0914 5.00 731 8121 351587 1008204 83.69 -0.007 AS 19K 0.12 JUL1803 SOILBLANK BCL34373 07/19/69 0926 5.00 97975 295344 -9.014 NE/EM 1153 75.62 t 0.00 JUL1904 SCILSPINE OCL35514 07/18/88 0937 5.00 74893 69019 149885 408591 1.02 87.57 0.812 NG/EN JUL1205 SOIL PE FF-A 67/18/88 0948 5.00 57231 54404 100957 3:6976 1.05 75,97 0.812 NS 'SM JUL1805 **KH1479 WH1479** 07/15/98 0959 5.03 2791 2568 28884 79049 -1.07 81.54 0.137 NS/SM JUL1807 KH2073 WH2073 07/18/88 1011 5.06 22718 19564 55359 174293 1.16 75.90 0.546 NS/SM JUL190B VH2074 WH2074 07/16/88 1023 5,12 12410 10872 97195 293703 0.161 **k**9/98 79.31 1.14 JUL 1609 WH2075 MH2075 07/18/68 1935 5.05 17180 16117 108520 342934 0.205 N5/SM 1.07 75.03 07/18/88 1048 JUL1810 KH2079 NH2079 5.04 33633 260977 1 1 1.00 74.91 -0.023 NE/BM JULIB11 WH2080 NH2080 07/18/89 1059 174775 5.13 155787 69819 216993 1.12 75.13 3.498 NB/6M JUL1912 WH2081 97/18/88 1110 NH2081 5.07 281241 260003 28750 291932 1.08 70.46 4.313 NS/BM JUL1813 WH2082 WH2082 07/18/88 1122 5.03 55919 55274 25980 73819 3.528 NG/64 1.01 82.50 JUL1814 WH208& MH268A 07/18/89 1133 5.10 79085 72059 49130 149425 77.54 2.329 NG/SR 1.10 JUL1815 HH2087 NH2097 07/18/88 1146 147150 135485 108356 345914 5.01 1.09 74.08 1.911 NS/SM JUL1816 WH2089 WH2088 07/18/88 1158 5.02 104356 96613 59519 115381 1.08 74.22 2.497 NG/8M 07/18/88 1207 JUL1B17 WH2092 WH2092 5.13 69761 79046 72491 221698 1.12 77.44 1.727 NE/SH JUL1818 MH2093 **#H2093** 07/18/88 1217 5.04 88718 82917 67576 275448 1.07 -75.47 1.443 NG 'SM JUL1819 NH2094 07/18/88 1227 **WH2094** 5.07 59509 53289 89276 279195 1.12 75.85 0.922 NB/BM JUL1820 ¥H2101 KH2101 07/19/89 1239 1.00 205008 653984 -0.114 K3/8M 1 - 1 1,00 75.60 JUL1821 KH2102 WH2102 07/19/98 1248 1.00 1049 2734 224393 713621 -0.052 NE/6M 0.73 75.46

# TOTAL PRINTE BATH REPORT SHEET

FILE PECELVES TORE:

5172: 157 DATE: 67/71-FE

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	CLIENT	AVALVSIS	PATIVE	SL9906412	TEDD	0521W	VALED	ETIKU	COMMENTS
KFE4 #	SAMPLE #	DATE TIME	94710	ASS	caxe.	CODE	CODE	dutis	Poweria
W-2-7 E	Zm Cc -	LF(_ '1, _	42.10	TISS	Carse	COUR	COPE		
METHELANK	FETHELM"	67/19/82 144	7 1.00#	77.04	0,300 8			NB/SM	
SCILBLAN'	OCL34329	07/19/69 150	0 1,00#	E0.19	0.300 U			NE/84	
SOLLEPIKE	DCL35697	97/19/EE 151	1.09	89,28	0.894			NG/6M	
SOIL PE	FE-AI	07/19/B3 152	4 1.11	76.46	0.782			NG/SM	
<b>381477</b>	RH1477	07/19/88 154	0.93*	76.02	0.399 U			NS/GX	
#H1478	#H1478	07/19/E8 155	2 0.3ef	78.37	0.300 u			NG/GM	
WH2018	WH2018	07/19/88 160	4 1.22	77.90	0.300 U			N6/64	
#H2019	KK2019	(7/19/99 161	7 1.05	78.07	1,402			NS/EX	
W42021	HH2071	07/19/98 163	1 1.06	81.72	1,520			NG/EN	
NH2022	WH2022	07/19/86 164	3 1.12	81.11	1.464			NG/68	
MH2096	WH2096	07/19/86 165	3 1.08	79.74	1.210			MB/BM	
#H2100	WH2100	07/19/88 170	5 1.00*	80.75	0.300 U			N6/8M	
KH2103	WH2103	07/19/88 171	5 1.13	77,77	0.631			NS/6M	
NH2104	WH2104	07/19/88 172	6 1.14	79.33	0.629			NS/SM	
WH2106	MH2106	07/19/68 173	6 1.16	77.73	0.838			NG/GM	
WH2107	¥H2107	07/19/88 174	8 1.07	77.89	1.206			NG/GM	
WH2111	WH2111	07/19/88 180	0 1.05	75.86	0.382			NG/SM	
VH2112	₩H2112	07/19/88 181	2 1.03	74.90	0.482			NS/EM	
¥H2113	WR2113	07/19/88 161	7 1.02	74.51	0.566			NG/GM	•
WH2117	WH2117	07/19/88 183	3 0.37#	80.48	0.300 H			NS/6H	UNITS OF NG PER SAMPLE
WH2118	WH2118	07/19/88 162	9 0.83*	77,30	0.300 H			NG/EM	
WH2119	¥H2119	07/19/88 185	4 1,00+	77.51	0.390 H			NG/GM	
WH2120	¥H2120	07/19/88 164	0 1.09	71.23	5.985			NG/6M	
WH2121	WH2121	07/19/89 145		46.58	7.188			NG/6M	

# QUALIFICATION FLAGS:

- \* 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE \*\* SURPORATE OUTSIDE OF ACCEPTABLE RANGE

# \*\*\* HIGH DETECTION LINIT

### RERUM CODES:

- A AUTOMATIC RERUN
- R REQUESTED RERUN

# STYYENES ADELE-SET FERENT FORK

5116: MER CASE: 0717 DATE: (7/21/88

ELESCORTE CONC. ALOS - PE NATIVE - 2.109 - ICH RATIO: 1.405 TD 1.233 - INTERNAL ETD CORE 1.45 - RE EMPROPRE - 2.033 - CAPPEDIAGN FACTOR: 0.410

LAB		CLIENT	ANAL Y		SAMPLE		159 2 <b>5</b> 9	169 243	IDA 258	82110	Sitab	2.52	17-119
SAMPLE ≇	AREA #	SAMPLE #	DATE	TIME	AMOUN"					257/259	AEC	MATHE	
2011902	METHBLANY	METHELNK	07/19/28	1447	5,00	1	ı	27460	85542	1.00	77.04	-9,925 /	43/3t
JUL 1993	SOILPLANK	0CL34329	07/19/98	1500	5,00	ı	1	44361	132761	1.00	90.19	~0.023 }	95/64
JUL1904	SOILSFIKE	0CL35587	07/19/88	1511	5.00	75735	69400	155694	916109	1.09	89.28	0.804 1	46/6N
JUL1905	SOIL PE	FE-AL	07/19/83	1524	5.00	20678	19642	37127	115837	1.11	76.46	0.762 (	NG/EM
JUL1906	¥41477	#H1477	07/19/88	1540	5.06	2022	2176	50164	189877	0.93	74.02	0.029 8	
JUL1907	KH1478	#R1476	07/19/88	1552	5.21	1108	3099	63400	255379	0.36	78.37	0.016 8	NG/6N
JUL1908	B102HH	WH2018	07/19/88	1604	5,07	12346	10026	89255	274586	1.22	77.90	0.168 1	NS/64
JUL 1909	HH2019	WH2019	07/19/88	1617	4.93	78502	74539	84853	75B249	1.05	78.07	1,402	16/6M
JUL1910	WH2021	¥H2021	07/19/89	1631	4.66	71202	668B7	75075	218216	1.06	81.72	1.520 H	NG/GM
JUL1911	WH2022	WH2022	07/19/89	1643	5.23	55229	49385	53814	157466	1.12	81.11	1.464 1	NG/GH
JUL1912	KH2096	WH2096	07/19/88	1653	4.84	33139	30784	42540	126965	1.08	79.74	1.210 1	48/6#
JUL1913	MH2100	WH2100	07/19/88	1705	4.98	1	1	51592	153339	1.00	80.75	-0.023 8	NG/SM
JUL1914	WH2103	WH2103	07/19/66	1715	5.04	32700	29015	72281	221959	1.13	77.77	0.631 1	46/6M
JUL1915	WH2104	WH2104	07/19/88	1726	5.12	38960	34300	66533	260522	1.14	79.33	0.629 1	46/6X
JUL1916	¥H2106	WH2106	07/19/88	1738	5.07	39116	33623	64446	197680	1.16	77.73	0.83B (	NG/6M
JUL 1917	MH2107	WH2107	07/19/98	1748	4.84	48902	45754	61410	187587	1.07	77.89	1.206 (	N3/6M
JUL1918	NH2111	WH2111	07/19/88	1300	5.09	J990	3783	14199	44785	1.05	75.86	0.382 /	NG/GH
JUL1918	WR2112	WH2112	07/19/88	1812	5.10	35334	34195	103101	320577	1.03	74.90	0.482 1	NG/SM
JUL2020	MH2113	WH2113	07/19/88	1617	5.08	57834	56809	141654	454236	1.02	74.51	0.366 1	MS/6M
JUL1921	HH2117	WH2117	07/19/88	1833	1.00	(48!	4004	263178	784791	0.37	80.48	~0.032 f	NG/6M
JUL2021	WH2118	WH211B	07/19/68	1629	5.04	7529	9085	390860	1213281	0.83	77.30	0.016 1	NG/GM
JUL 1923	BH2119	WH2119	07/19/88	1254	5.11	1	1	21204	45458	1.00	77.51	-0.022	NS/GM
JUL2022	WH2120	WH2120	67/19/88	1640	5.04	2642946	2429230	417978	1986078	1.09	71.23	5.785	NG/68.
JUL2023	MH2121	WH2121	07/19/68	1653	5.04	2476225	2259524	455339	1544893	1.10	64.58	7.199 (	NG/SM

# TEDO FINAL DATA REPORT SHEET

FILE RECEIVED DATE: FILE RECEIVED TIME:

SITE: HER CASE: 0719 BATE: 07/24/86

	0: 7547			0.00000175	7000	DEBIN.	NA	111.576	OBMMENTS
	CLIENT	ANALYSIS	NATIVE	SURROGATE	TCOR	FERUN	VALIO	UNITS	COMMENTS
APEA #	SAMPLE D	PATE TIME	RATED	ACC	CONC.	CODE	CODE		
METHBLANK	METHBLNK	97/20/88 115	1.00#	77.71	0.300 U			NS/GM	
SDILBLANK	OCL34559	07/20/88 120	6 0.564	78.73	0.300 U			NG/6H	
SCILSPIKE	DCL35536	07/20/88 121	1.12	92.09	0.834			NG/EM	
SOIL PE	PE-B	07/20/88 122	7 1.11	74.22	3.897			NG/GM	
WF2122	NHZ122	07/20/88 141	5 1.06	71.11	6.417			VG/EM	
HH2123	<b>#</b> 92123	07/20/88 143	1 1.20	76.95	1.291			NG/GH	
WH2124	HH2124	07/20/88 144	3 1.11	44.61	1.843			NG/GK	
¥H2125	WH2125	07/20/68 145	5 1.12	69.52	2,805			NS/68	
WH2130	WH2130	07/20/88 150	5 0.16#	70.17	0.300 U			ME/EM	
WR2131	WH2131	07/20/88 151	5 1.00¥	70,05	0,300 8			NS/SM	
WH2132	WH2132	07/20/88 152	6 1.00#	72.94	0.300 U			NG/EM	
WH2133	WH2133	07/20/88 153	8 0.51*	77.27	0.300 U			NG/SH	
MR2134	NH2134	67/20/88 154	9 1.00#	77.54	0.300 U			NG/EX	
₩H2135	XF2135	07/20/88 160	6 0.99#	71.53	0.300 U			NS/GH	
WH2137	442137	07/20/88 171	4 0.69#	73.99	0.300 U			NG/SK	
MH213B	WH2138	(7/20/99 172			0.300 U			NG/EM	
WH2139	WH2139	07/20/99 173			0.300 U			MS/GM	
HH2143	WH2143	07/20/68 175		75.72	0.300 U			NG/SH	
WH2144	WH2144	07/20/88 180		82,12	0.300 U			NE/6M	
W#2146	HH2146	67/20/8B 181		75.22	0.300 U			NG/GM	
WH2149	442149	07/20/89 192			0.300 U			NG/EM	
WHZ150	R-2150	07/20/88 193			0.300 U			K3/84	
	2.47	***********	7,47,						

### QUALIFICATION FLAGS:

- \* 257/259 RATIO DUTSIDE OF ACCEPTABLE PANGE
  \*\* SUBFICIALE OUTSIDE OF ACCEPTABLE RANGE
- \*\*\* HIGH CETECTION LIMIT

# REPUN CODES:

- A AUTOMOTIC PERUN P REQUESTED PERUN

#### SC/MS/MS WORKSHEET REPORT FORM

SITE: HER CASE: 0719 DATE: 07/24/68

SUPAGGATE CONC 0.05 RF NATIVE 2.109 ION RATIO: 1.009 TO 1.233
INTERNAL STD CONC 1.05 RF SURROGATE 2.083 CORRECTION FACTOR: 0.010

			*		*****								
LAB		CLIENT	ANALYS		SAMPLE	10N 257	10N 259	10m 593	ION 268	DITAR	SURR	RAN	UNITS
SAMPLE #	AREA #	SAMPLE &	DATE	TIME	AMOUNT					257/259	ACC	VALUE	
JUL2006	METHELANK	KETHBLNK	07/20/38	1155	5.00	1	1	2:2292	555634	1.00	77.71	-0.023	N9/64
3012007	SOTLELANX	OCL34559	07/20/89	1206	5.00	2403	4328	237130	722755	0.56	78.73	-0.001	N6/83
JUL2008	SOLFSEIKE	001.35536	07/20/68	1216	5.00	52490	46971	106177	275291	1.12	92.09	0.834	VE/88
3UL2009	SGIL PE	PE-B	07/20/88	1227	5.80	341496	307914	125172	392847	1.11	74.22	3.897	NG/6M
JULZ010	≢#2122	¥H2122	07/20/88	1415	5.17	329386	311163	70282	227218	1.05	71.11	6.417	NS/SF
JUL2011	\$H2123	WH2123	07/20/88	1431	4.94	62777	52296	71203	214401	1.20	78.95	1,291	
JUL 2012	¥42124	Nº2124	07/20/88	1443	4.87	18549	16656	12694	45734	1.11	55.61	1.843	NE /GH
JUL2013	MH2125	#P2125	07/20/88	1455	4.94	149018	132915	70875	229203	1.12	59.52	2,805	
JUL2014	k42130	¥42130	07/20/88	1505	5.50	817	5019	230493	788990	9,15	70.17	-0.005	
JUL2015	WH2131	WH2131	07/20/99	1516	5.23	1	1	70027	239927	1.00	70.05	-0.022	
JUL2016	WH2132	WF2132	07/20/88	1526	5.07	1	t	84828	279105	1.00	72.94	-9,023	
JUL2017	WH2133	WH2133	07/20/88	153B	4.28	974	1718	149508	525489	0.51	77,27	-0.011	N3/68
JUL2018	#42124	WH2134	07/20/88	1549	4.96	1	1	46470	143494	1.00	77.64	-0.023	
JUL2019	KH2135	MHZ135	07/20/88	1505	5.14	3138	3512	56205	187685	0.39	71.83	9,059	N9/64
JUL2025	¥H2137	N42137	07/20/88	1714	5.22	2853	4146	65058	210937	0.69	73.99	0.053	
JUL2026	VH2138	¥H213B	07/20/68	1727	5.05	1	1	24449	7705:	1.00	76, 12	-0.023	
JUL2027	W42139	MH2139	67/20/99	1739	4.99	4017	3019	42281	131835	1.33	76.89	0.104	
JUL2028	¥H2143	WH2143	07/20/88	1753	5.14	ŧ	1	62472	198018	1,00	75.72	-0.022	
JUL2029	kH2144	WH2144	07/20/88	1803	5.02	ı	1	41:64	120302	1.00	82.12	-0.023	
13F5036	#F2146	HH2146	07/20/68	1815	5.22	1	1	9316	25532	1.00	75.22	-0.022	
JUL2031	¥2149	WH2149	07/20/88	1924	5.17	4346	7470	110570	357584	0.58	74.38	0.054	
JUL2032	¥H2150	¥H2150	07/20/EB	1838	5.16	10898	13037	260385	797022	0.84	78-37	0.047	

# TOOL FORTE BOTH FEFORE BASET

FILE RECEIVED DATE: FILE RECEIVED TIME:

STREE HEF CHEEK 171F DATE: 07/21/65

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8.0	EFA	ANALYS	319	NATIVE	SURROSATE	TODS	PERUN	VALIB	UNITS	COMMENTS
SPAPLE &	SARFLE #	OFTE 1	THE	FATIO	ACS	CDXC.	CODE	CODE		
METHELANY	METHBLAY	07/21/88	1039	6.39#	82.31	0.300 8			NS/6H	
SOILBLANK	OCL34697	07/21/88	1058	0.15*	80.97	0.300 U			Ne/en	
SOLLSPILE	DCL33739	07/21/88	1100	1.07	94.57	0.232			NG/GM	
SUIL PE	₽ <b>₹-</b> A	97/21/89	1111	80.2	80.21	0.801			NG/SM	
¥82151	WH2151	07/21/68	1121	2.40∗	78.75	0.300 U			NG/EM	
HH2152A	WK2152A	07/21/88	1132	0.77#	01.18	0.300 4			NS/GH	
WH2153B	NH21538	07/21/68	1144	1.00€	78.72	6.300 U			NG/GM	
WH2154C	WH2154C	07/21/88	1155	1.06	B1.02	0.300 U			NG/SH	
WH2155B	WHZ1559	07/21/89	1205	0.76*	82.59	0.300 U			NG/6M	
WH2156	WH2156	07/21/88	1215	0.81#	82.69	0.300 H			NG/SM	
WH2157	MH2157	07/21/88		1.39+	80.78	0.300 H			WS/SM	
WH2158	¥52158	07/21/88	1235	1.26#	79.24	0.300 8			NE/GR	
WH2162	WH2162	07/21/88	1246	1.00€	82,30	0.300 8			NG/GM	
WH2163	WH2163	07/21/88	1256	1.004	88.13	0.300 U			N6/6N	
WH2164	WH2164	07/21/88			83,43	0.300 1			NG/EM	
WH2166	WH2166	07/21/88			87.15	0.300 B			NG/SH	
WH2169	WH2169	07/21/68	1326		77.18	0.300 U			NG/GM	
WH2170	NH2170	07/21/88	1337		79.58	0.300 U			NE/GH	
WH2171	WH2171	07/21/83			80.64	0.300 U			NS/SM	UNITS OF NO PER

# QUALIFICATION FLAGS:

- \* 257/259 RATIO DUTSIDE OF ACCEPTABLE RANGE
- \*\* SURROBATE DUTSIDE OF ACCEPTABLE RANGE
- \*\*\* HIGH DETECTION LIMIT

- RERUM CODES; A AUTOMATIC RERUM
- R REQUESTED RERUN

# 

2015: -55 6355: 6717 6466: 67-0/63

5.5863876 6570 - 6-1 17.58991 870 65%0 - 1.1 ga Marina - 1.179 as eyekboote - 1.40 

L98	SM3	EPA	ANALYS	319	SAMPLE	ION 257	IGN 257	108 263	ION 253	64710	SURP	444	0.555
SAFFLE 🛊	SAMPLE #	SAMPLE #	DATE	TIME	AMOUNT					257/259	ACC	44F9E	
JUL2102	NETHELANK	METHBLINK	07/21/88	1039	5.00	520	1342	191795	559225	9,30	90.31	-0.015	re ey
3UL2103	SOILBLANK	00L34687	07/21/89	1050	5.00	1063	6365	348592	1933189	0.15	90.97	-6 ph#	75 · C*
1012164	SUILSPIKE	SCL35739	97/21/83	1100	5.68	88466	82456	187735	473994	1.07	94.57	9.832	N8/5h
JUL2105	SOIL PE	PE-A	07/21/68	1111	5.00	£6537	à1570	123993	348866	1.08	80,21	0.501	1978!!
JUL2105	4H2151	WH2151	07/21/88	1121	5.04	2815	1175	43933	133804	2.49	73.75	0.047	19737
JUL2107	WH2152A	WH2152A	07/21/89	1132	4.97	2325	3016	67023	198098	0.77	91.18	9.24!	N2/94
JUL2108	WH21538	¥H21538	07/21/88	1144	5,20	:	ı	47386	144472	1.00	78.72	-0.022	의동 /토르
JUL2109	NH2154C	WF21540	07/21/88	1155	4.90	4909	4610	68542	26214L	1.96	81.02	0.065	NETER
JUL2110	WH21550	MH21559	07/21/88	1205	5.22	1879	2467	49714	144399	0.76	82.59	0.046	NE - BM
JUL2111	₩H2158	NH2156	07/21/89	1215	5.01	3014	3708	94585	274435	0.81	82.49	0,035	NG AGM
JUL2112	WK2157	WH2157	07/21/88	1225	4.96	.3366	2425	41438	123006	1.39	80.78	9.089	NG/EM
JUL2113	WR2158	WH2158	07/21/88	1235	5.19	4012	3193	87628	255261	1.26	79.24	0.040	45/BM
JUL2114	WH2162	WH2162	07/21/88	1248	5.05	1	1	78936	230187	1,00	82,30	-0.017	NE/SX
JUL2115	WH2163	MH2163	07/21/88	1256	4,93	1	1	40567	110469	1.00	88.13	-0.023	NS/SM
JUL2116	WH2164	MH2164	07/21/88	1396	4.90	1	1	38776	111544	1.00	87.43	-0.023	NE/SK
JUL2117	WH2166	WH2166	07/21/88	1516	5.10	1	ì	17901	49296	1.00	87.15	-0.022	118734
JUL2118	WH2169	MH2169	07/21/68	1324	5.20	11029	10337	113186	351694	1.07	77.18	0.117	NG/68
JUL2119	WH2170	WH2170	07/21/88	1337	5.16	18727	16563	212534	6403B3	1.13	79.58	0.104	NE FM
JUL2120	WH2171	#42171	07/21/88	1350	1.00	9	5148	277707	826467	0.00	80.64	-0,040 1	NS/54

#### TODO FINAL DATA REPORT SHEET

FILE PECELVED DATE: FILE RECEIVED TIME: SITE: HER CASE: 0720 DATE: 07/23/88

		\$1.41 HG **		000000475	7000		10		********
SMO	ZPA	AKAL VSIS		SURROGATE	TCDD	REPUN	VALIS	UNITS	COMMENTS
SAMPLE #	SAMPLE 1	DATE 71M	E RATIO	ACC	COMC.	CODE	CODE		
<b>FETHBLANK</b>	METROLAK	07/21/89 1	513 1.00#	88.42	0.300 U			NG/6M	
SOTUBLANK	QCL24575	07/21/88 1	524 1.00#	84,14	0.300 4			NG/6H	
SOILSPIKE	QCL35739	07/21/88 1	534 1.10	88.52	0.804			NG/SM	
SDIL PE	FE-A	07/21/88 1	545 1.06	80.87	0.808			#8/8#	
₩H2034	WH2034	(7/21/86 1	556 1.11	81.05	2, 153			NE/GK	
NH2035	WH2035	07/21/88 1	407 1.10	79.65	1,986			NG/BM	
KH2036	WH2036	07/21/88 1	618 [.09	81.66	1,864			NE/SM	
8H2042	WH2042 '	07/21/89 1	629 1.14	82.38	0.693			NG/GM	
NH2043	MH2043	07/21/89 1	641 1.03	81.28	1,445			M6/68	
WH2044	WH2044	97/21/98 1	552 1.09	82.98	0,738			HB/SM	
KH2083	WH2983	07/21/88 1	703 1.09	79.08	2,772			MG/GH	
W42094	#42084	07/21/88 1	715 1.13	79.68	1.637			16/6H	
UH2085	KH2085	07/21/58 1	725 1.07	32*22	1.343			NG/GM	
¥F2087	MH2089	07/21/68 1	737 1.11	82.53	1.253			KG/SM	
WH2090	WH2090	07/21/88 1	747 1.08	84.26	1.880			NG/6H	
WH2091	W22791	<del>_0</del> 7/21/88 1	758 1.07	82.75	1,265			MB/SM	
¥H2097	NH2097	07/21/88 1	621 1.12	79.66	0.894			NG/8M	
₽42078	#H2//98	07/21/88 1	933 1.12	82.11	9,996			BB 48#	
W42173	K42173	67/21/88 1	244 1.05	61.81	0.30° U			NS/SK	
WH2177	WH2177	07/22/89 1	025 1.01	85.00	0,360 #			KG/GM	
FH2178	¥42178	07/22/89 1	004 1.01	81.16	0.300 U			NE/EK	
H42179	4-2179	07/22/63 (	047 0.92*	81.83	0.300 8			K5/GH	
442183	kh2153	07/25/65 :	059 1.00*	62,42	6,300 U			53/84	
12154	440184	17/22/83 1	111 0.794	81,65	0.300 %			N5/64	

### QUPLIFICATION FLARS:

- \* 257/259 PARED DUTGING OF ACCEPTABLE PARES
  \*\* SUFFICIATE CUTSIDE OF ACCEPTABLE SAMES
  \*\*\* WIRW CETEOTION LINES

- TEFL 00068: 4 AUTOMOTO TEFL. 7 REFURENCE TEFL

#### GC/MS/MS WORKSHEET REPORT FORM

IBN PATIO: 1,009 TO 1,233

CORRECTION FACTOR: (.010

SURRBEATE CONC. 0.1

34...2266

-0154

AF2194

7/25/88 1111

3. 17

10765

INTERNAL STE CONC. 1.1

RE MATIVE

PF SUPROBATE 2.08

2.109

SITE: HER CASE: 0720 DATE: 07/23/88

1,147.55

21 25

247. **=P4** ANALYSIS SAMP.E IOM 257 ION 268 PATTO SHIP C:U UNITS LAB 194 259 108 263 SAMPLE # SAMPLE # SAMPLE & DATE AHOURT 257/259 ACC VALUE 101.2121 METHELANK KETHELNK 07/21/83 1513 5.00 128735 349435 1.00 83.42 -0.023 NS/SK 1 1 BOILELANK -0.023 NS/EM JJL2122 OCL34575 07/21/69 1524 5.00 5666B 141633 1.00 34.14 SEILBRIKE QCL35739 07/21/68 1534 5.00 92890 84319 :23373 507993 86.52 CLRO4 NG/EM JUL2123 1.10 JUL2124 SOIL PE PE-A 07/21/98 1545 5.00 43533 €5070 127436 381940 1.06 80.87 0.808 NE/84 07/21/88 1555 127408 JUL2125 W42034 NH2034 5.01 174293 400666 20.19 2.153 NG/SM 194159 1.11 JUL2126 ₩H2035 WH2035 07/21/88 5.05 59927 177972 1,10 79.65 1.056 16/65 1507 79843 72379 MH2036 ¥H2036 07/21/88 1518 183943 . 1.09 1.864 XB/GF JUL2127 5.07 77257 71157 53417 31.44 XH2342 JUL2128 ¥82042 07/21/88 1529 5.08 24220 21338 51279 148639 5.14 82.39 0.293 NB/SM 1,445 N9/68 JUL2129 MH2043 #42043 07/21/88 1641 5.01 14891 14395 15144 47193 1.05 81.28 52423 JUL 2130 890044 WH2044 07/21/88 1452 5.02 25221 23346 150828 1.98 62, PE 0.739 NB/64 JUL2131 645053 KH2083 07/21/88 1703 5.16 239356 220159 130274 187503 1.79 77.03 2.702 Na13# **880084** KH2684 49319 1.037 89/64 JUL2132 67/21/89 1715 5.14 43764 43483 129359 1.13 79.65 JUL2133 842099 442085 07/21/88 1725 5.14 54161 58640 72739 207507 1.07 87.33 1.343 NB 'BY JUL2134 442059 ¥42089 97/21/83 1737 5.05 121459 109460 147474 425048 1.11 \$2.53 1,053 88/98 JUL2135 ¥42090 WH2090 07/21/88 1747 5.04 58227 63343 90277 280661 1.08 54.25 1,080 NE:3" Antibai 453051 1,255 43784 JUL 2135 07/01/88 1759 5.02 155217 145476 171551 551576 1.07 82.75 JUL2138 142197 WR2097 07/21/68 1221 5.10 59845 57559 05040 287140 77.56 0.898 %6194 1.12 ¥47)99 0.565 \$3754 3802139 \$40093 17/21/59 1903 5,96 91905 82225 157136 444713 1,12 52.11 JUL 2140 M-0173 492177 67/21/82 :344 5.08 24758 23633 111095 621100 1.05 81.81 0.159 45'5" E-2177 1005 0.071 82-38 LH2177 07/22/59 654011 1,01 3012202 5.14 13403 13417 031765 E5.00 100727 JUL2203 ¥-5178 5º2175 07/22/88 1935 5,07 1.01 5719 5564 124281 81.16 0.059 80185 1361204 4-1179 2-3179 07/52/66 1007 5,18 122571 5,52 81,87 4,752 13:80 8416 9236 954937 .-1151 115 21174 6. 75 43,54 1012205 r=3193 00/20/99 361:21 1055244 1.00 5.01 21752 92,42

17550

174396

804247 0.79



6376 Morenet Trail Indianapolis, Indiana 46268 317-291-5697

#### TODO FINAL DATA REPORT EMEET

FILE RECEIVED DATE: FILE RECEIVED TIME: STTE: HEF CASE: 6729 DATE: 08/11/88

	CLIENT	ANALYSIS	NATIVE	SURFOGATE	TCCO	RERUN	VALID	UNITS	COMMENTS
# ABPA	SAMPLE \$	DATE TIME	RATIO	ACS	CGNC.	CODE	CODE		
METHPLANK	METHBLNK	07/25/B8 091	4 0.69#	87.26	0.300 ย			NG/6M	
SOLLBLANK	OCL34559	07/25/88 092	9 0.80#	85.43	0.300 H			NS/SN	
SOILEPIKE	OCL35536	07/25/89 094	0 1.36	93.17	0.849			NB/EM	
SCIL PE	PE-A	07/25/68 095	0 1.07	84.29	0.839			NG/Br	
WH2185	FH2185	07/25/83 100	3 1.00≠	84.10	6.300 U			NG/GM	
NH21E9	MH2189	07/25/89 101	7 0.914	82.35	0.300 U			M8/8M	
WK2190	WHZ190	07/25/88 103	0.89#	82.95	3.300 N			NG/SM	
¥42191	WH2191	07/25/88 104	1 0.79*	83.90	0,300 U			PS/6N	
¥42193	WH2193	07/25/88 105	3 0.96+	84.58	0.300 E			H6/68	
W42197	XH2197	07/25/98 110	4 6,934	85.16	0.300 U			N6/6M	
WH2178	¥#2198	07/25/88 111	5 0.89#	85.37	0.300 U			NG/BM	
HH2199	#H2199	07/25/88 112	5 0,83+	84.95	0.300 U			NG/6N	
WH2203	<b>9</b> 2203	07/25/89 113	5 0.07+	84.33	0.30C U			NG/GH	UNITS OF NO PER SIMPL
WH2204	WH2204	07/25/68 114	5 1.00±	88.55	0.300 8			NG/6H	
NH2205	WH2205	97/25/88 115	5 0.294	87.07	0.300 U			NG/GY	UNITS OF NO PER SAMPL

## QUALIFICATION FLAGS:

- \* 257/259 RATIC OUTSIDE OF ACCEPTABLE RANGE \*\* SURROBATE OUTSIDE OF ACCEPTABLE RANGE
- \*\*\* HIGH DETECTION LIMIT

# RERUN CODES:

- A AUTOMATEC REPUN
- R REQUESTED RERUN

# SC/MB/MS | KORMSHEET PERDRY FORM

BITE: HER CASE: 0720

DATE: 08/01/88 SPROSATE CONS 0.06 RE NATIVE 2.109 10% PATIS: 1.009 TO 1.231 1975PHOL STO COME 1.05 RF SURFIGARTE 2,033 COPRECTION FACTOR: 0.010 CLIENT SAMPLE ION 257 ICM 259 104 258 91178 UNITS 1.55 ANALYSIS TON 243 FATIO 224 ATOLE & AREA # SAMPLE P DATE TIME AMBUNT 257/259 ACC VALUE -0.007 N9/EM JJL2502 METHBLANK METHBLNK (7/25/89 0914 5.00 1358 2004 178637 491279 £7.2t 0.68 UL2503 SOILBLANK OCL34559 67/25/88 0929 5,00 1526 1909 111666 312934 0.80 85.63 0.003 NE/GM SOILSPIPE OCL35536 07/25/99 0940 139912 131452 287972 737942 0.549 NB/EM UL2504 5.00 1.08 90.17 JUL2505 SOIL PE PE-A 07/25/88 0950 5.00 129857 120531 244918 693358 1.07 84.29 0.830 NG/SM "UL2506 WH2185 KH2185 07/25/88 1003 5.04 12283 12268 201105 573538 1.00 84.10 0.078 NG/SM UL2507 WH2189 WH2169 07/25/88 1017 5.09 11378 12483 124994 364372 0.91 82.25 0.170 #6/6\* JUL2508 15957 ¥H2190 ¥42190 07/25/85 1030 5, 13 14136 253920 734207 0.29 82,95 0.072 NG/55 1012509 W42191 WH2191 07/25/88 1041 5.17 14144 219037 0.74 57.90 11235 626210 0.071 NG/SM UL2510 ¥H2193 14121 WH2193 07/25/88 1053 5.02 13562 146742 415962 0.98 84.59 0.134 NG/65 7812511 WH2197 WH2197 07/25/88 1164 17555 18796 260404 789673 85.16 0.086 NG/GM 5.01 0.93 JUL2512 WH2195 NH2198 07/25/B3 1115 5.01 9715 10768 255669 749418 0.89 85.37 0.042 NG/6K 07/25/58 1125 14032 84.95 1012513 ¥H2199 HH2199 5.15 11599 231607 654003 0.83 0.068 NG/6M JUL2514 ¥H2203 WH2203 07/25/98 1135 1.00 422 4094 380335 1057301 0.07 84.33 -0.041 NG/65 JUL2515 MH2204 WH2204 07/25/83 1145 88.58 5.03 1 113588 307765 1.00 -0.023 NG/SK UL2516 ¥H2205 HH2205 07/25/88 1155 1.00 2930 326356 899525 B7.07 -0.065 NS/EM 841 0.29



# TMS ANALYTICAL SERVICES, INC.

6376 Morenci Trail Indianapolis, Indiana 46268 317-291-5697

# TODD FINAL DATA REPORT SHEET

FILE RECEIVED DATE: FILE RECEIVED TIME: SITE: HEF CASE: 0722 DATE: 08/01/58

	CLIENT	AMA_YSIS	NATIVE	SURROGATE	TCDD	PERUN	VALID	UNITS	COMMENTS
AREA #	SAMPLE P	DATE TIME	PATIO	ACC	CONC.	CODE	CODE		
METHBLANY	METHBLINK	07/28/88 141	6 0.02+	71.40	0.300 U			NG/SM	
SOILBLANK	OCL34694	07/26/88 142	7 0.13+	69.73	0.300 U			NG/SM	
SOILSPIFE	OCL35512	97/25/68 143	8 1.19	79.44	0.808			NG/GM	
SDIL PE	FE-A	07/26/68 144	9 1.18	69.66	0.752			NG/EM	
¥42099	N42099	07/26/88 150	0 1.09	69.45	0.710			NG 'GN	
WH2204	¥H2204	07/26/68 15	0 1.15	70.99	1.890			NG/6M	
W-2207	¥H2207	07/26/88 153	2 1.00#	69.79	0.300 U			NG/6M	
NH2203	WH2208	07/25/BE 153	3 1.18	70.58	1.702			NG/GX	
WH2209	¥42209	07/26/88 154	9 1.00¥	70.81	0.300 U			NG/88	
WH2210	WH2210	07/26/88 15	9 0.27*	70.63	0.300 U			NG/GM	
WH2212	WH2212	07/26/88 16	0.57#	71.04	0.300 U			NG/8M	
WH2213	NH2213	07/26/88 162	2 1.00+	72.33	0.300 U			NG/GM	
WH2214	NH2214	07/26/88 163	4 0.33#	71.36	0.300 U			NG/GH	
WH2215	¥HZ215	07/26/89 16/	5 1.10	71.73	0.300 U			NG/EM	

# QUALIFICATION FLAGS:

- . 257/259 RATIO CUTSIDE OF ACCEPTABLE RANGE
- \*\* SURROGATE DUTSIDE OF ACCEPTABLE RANGE
- \*\*\* HIGH SETECTION LIMIT

#### PERUN CODES:

- A AUTOMATIC RERUN
- R REQUESTED RERUN

# BOTHS MORPSHEET FERDRY FORM

SITE: HER CASE: 0722 DATE: 08/01/EB

 EURSDBATE COME
 0.06
 RF NATIVE
 2.109
 IOM RATID:
 1.009 TO
 1.233

 INTERNAL STD COME
 1.05
 RF SUFFDEATE
 2.083
 COFRECTION FACTOR:
 0.010

¥E VAFLE ≢	RFEA #	CLIENT SAMPLE #	AVALYS DATE	IS Time	SAMPLE AMOUNT		19N 259	10N 263	104 268	RATEO 257/259	SUP# ACC	RAK VALUE	LYETS
*3L2609	METHBLANK	METHBLNK	07/26/88	1416	5.00	154	6734	265515	892519	0.02	71.40	-0.005	NG/ER
112610	SOILBLANK	OCL34694	07/26/89	1427	5.00	926	6913	193509	565997	0.13	69.73	0.065	NG/G#
JUL2511	SOILSPIKE	OCL35612	07/26/68	1438	5.00	127577	140238	332613	993537	1.16	79.44	0.808	NS/EX
3002612	SDIL PE	PE-A	07/26/B9	1447	5.00	113507	98457	187771	642724	1.19	69.66	0.752	NS/GH
JL 2613	NH2099	WH2099	07/26/98	1500	5.22	49849	45847	86495	297033	1.09	69.45	0.710	NG/SK
.JL2614	NH2205	WH2204	07/26/88	1510	5.33	162877	141235	106463	353989	1.15	70.99	1.990	NG/64
JUL2615	¥H2207	NH2207	07/26/88	1522	5.22	1	!	85937	295192	1.00	69.79	-0.022	NB/SM
. UL2518	WH2208	NH2208	07/26/88	1533	5.96	234422	199024	175742	588954	1.18	70.58	1.702	NG/GX
_UL2617	¥H2209	WH2209	07/25/98	1549	5.17	1	1	168200	5700B2	1.00	70.81	-0.022	NS/EK
JUL2618	WH2210	MH2210	07/26/88	1557	5.14	2625	9639	311801	1059333	0.27	70.63	0.004	NG/6K
UL2619	WH2212	WH2212	07/26/68	1610	5.54	4358	7430	320735	1083443	0.57	71.04	0.003	NG/SK
UL2620	¥H2213	WH2213	07/26/88	1822	5,25	62454	62314	658388	2182360	1.00	72.33	0.107	NG/6M
JUL2621	WR2214	WH2214	07/26/88	1634	5.35	3008	9203	417041	1402529	0.33	71.36	-0.002	NG/GM
"UL2622	NH2215	WH2215	07/26/88	1545	5.23	105664	96437	441986	1475111	1.10	71.73	0.289	NB/SM



# TMS ANALYTICAL SERVICES, INC.

6376 Morenet Trail Indianabolis, Indiana 4626S 317-291-5697

TODE FINAL DATA PEPERT SHEET

FILE RECEIVED DATE: FILE RECEIVED TIPE: SITE: REF CASE: 0726 DATE: 08/01/68

	CLIENT	ANALYSIS	MATIVE	SURPOGATE	TCDB	RERUK	VAC10	UNITS	COMMENTS
AREA \$	SAMPLE +	DATE TIME	FATIO	ACC	COMC.	3100	CODE		
METHBLANK	NATROLNA	07/27/58 1535	0.37#	57.25	0.300 B			NG/GM	
SOILBLANK	OCL34322	07/27/88 1553	0.72#	45.64	0.300 4			NE/EM	
SOILSPIKE	OCL35612	07/27/88 1403	1.17	77.56	0.820			MG/SM	
SOIL PE	FE-A	07/27/88 1614	1.21	66.64	0.746			KG/GX	
WH2220	WH2220	07/27/EB 1525	1.05	48.84	0.300 U			NG/6H	
WH2221	WH2221	07/27/68 1657	1.14	69.57	2,705			NS/6N	
NH2224	KH2224	07/27/88 1707	1.19	71.27	0.710			MB/EN	
KH2225	¥H2226	07/27/68 1720	1.17	70.88	7.336			MB/EM	
NF2227	WH2227	07/27/88 1730	0.43+	71.29	0.300 U			NG/GM	
¥H2228	NH2228	07/27/98 1741	8.344	7(.72	0.300 U			NG/SH	
¥H2229	¥H2229	07/27/88 1751	0.81+	71,15	0.300 U			NE/BN	
WH2230	WH2230	07/27/88 1801	0.82*	72.60	0.300 U			N6/6%	
WH2232	NH2232	07/27/88 1812	6.474	71.09	0.300 1			NG/SM	
WH2233	NH2233	07/27/89 1823	0,94+	72.96	0.300 U			NS/GR	
WH2234	NH2234	07/27/83 1833	0.75#	71.53	0.300 H			NG/SK	
WH2235	NH2225	07/27/68 1844	0.944	71.39	0.300 U			RS/EX	
WH:2236	kH223&	07/27/88 1853	0.41*	73.51	0.300 8			NG/GM	
WH2237	WH2237	07/27/68 1905	0.474	74.69	0.300 8			NG/SH	
WH2238	WH2238	07/27/88 1917	0.37+	71.93	0.300 8			NG/EK	
MH2240	WH2240	07/27/83 2011	1.01	73.55	0.580			N6/6#	UNITS ARE NG/SAMPLE
WH2741	¥42241	07/27/88 1929		72.63	0,300 1			NE/GH	
WH2242	WH2242	07/27/88 1950	0.00+	71.59	0.300 0			NG/65	
WH2243	NHZ243	07/27/88 2006			0.300 N			NS/SK	
WH2222	KH2222	97/27/86 1646	1.16	69.57	2,540			NG/GK	

# QUALIFICATION FLAGS:

- \* 257/259 RATIO DUTSIDE OF ACCEPTABLE RANGE
- \*\* SURROGATE OUTSIDE OF ACCEPTABLE RANGE
- \*\*\* HISH DETECTION LIMIT

#### RERUM CODES:

- A AUTOMATIC RERUN
- R REQUESTED RERUN

B-31

# 90/48 \*8 | F03 6-88\* F8F0FT F09\*

EITE: PER CASE: 0724 DATE: 08/01/E3

 $\bigcirc$ 

SURROGATE CONC. 0.06 INTERNAL STD CONC. 1.05 RF NATIVE 2.109 RF 805F03ATE 2.083 10% F6\*10: 1.009 10 1.233 03-PESTISN F9CTOR: 0.010

LAF		C' ACUT	AKALYS:	,,	SAMPLE	103 257	ION 259	ION 263	TC: 010	*****	2012	500	
LAE	****	ELIENT				100 201	10% \$34	108 265	10% 268	RATIO	SUPF	RSN	UNITS
SAMPLE 1	AREA #	SAMPLE !	DATE	TIME	4MOUNT					257/259	400	ASTOE	
JUL2708	METHBLANK	NATHBLNK	07/27/88	1505	5.00	2517	7694	336444	1200593	0,33	67.25	-0.003	V9/E1
JUL2709	SOILBLANK	BCL34322	07/27/89	1553	5.00	2570	E164	329847	1153258	0.32	68.64	-0.091	NS/64
JUL2710	SDILSPIKE	0CL35612	07/27/82	1603	5.00	254452	242839	482637	1484029	1.17	77,55	0.820	16/6K
JUL2711	SOIL PE	PE-A	07/27/EB	1514	5.00	122783	101506	199367	692449	1.21	69.64	0.746	116764
JUL2712	WH2220	MH2220	Q7/27/8B	1625	5.04	54380	51987	362779	1252772	1.05	68.84	0.175	NS/88
JUL2715	WH2221	WH2221	07/27/88	1657	5.26	374561	323032	171221	576692	1.16	69.57	2.705	ME/EM
JUL2716	WH2224	NH2224	07/27/88	1707	5.36	187484	159321	315142	1054365	1.15	71.27	0.710	M3/64
JUL2717	WH2226	MH2226	07/27/68	1720	5.13	524021	446507	286506	950995	1-17	76.88	2,036	NG+E+
JUL271B	¥2227	WH2227	07/27/EB	1730	5.49	5579	15531	272133	915874	0.43	71.29	0.032	NG/6H
JUL2719	WF2228	WH222B	07/27/8B	1741	5.35	7371	6812	217742	738664	0.84	70.72	0.027	NS/SM
JUL2720	WH2229	NH2229	07/27/88	1751	5.24	5531	6815	197552	664133	0.81	71.15	0.020	NS/8*
JUL2721	WH2230	WH2230	07/27/88	180 t	5, 27	6972	10781	168925	558091	0.82	72.60	0.059	M8/84
JUL2722	WH2232	WH2232	07/27/88	1812	5.39	2654	5677	189441	639441	0.47	71.09	0.007	NS/SX
JUL2723	WH2233	WH2233	07/27/89	1823	5.10	16763	17743	225995	75213B	0.94	72.06	0.0E#	MB\EW
JUL2724	NH2234	WH2234	07/27/88	1933	5.16	3940	5258	137242	450332	0.75	71.53	0.024	NG/SX
JUL2725	WH2235	NH2235	07/27/89	1844	5.01	12213	12979	153566	515818	0.94	71.39	0.093	NE/EN
JUL2726	MH2236	MH223&	07/27/88	1855	5.15	1242	3020	81332	265506	0.41	73.51	0.015	NG 'SM
JUL2727	MH2237	HH2237	07/27/88	1905	5.10	1872	4657	90097	239428	0.40	74.69	0.030	Ne/es
JUL2728	WH2238	NH2238	07/27/88	1917	5.03	1060	2852	140788	469727	0.37	71.93	-0.003	NG/BH
JUL2733	WH2240	MHZ240	07/27/88	2011	1.00	13873	13693	144375	470640	1.01	73.55	0.536	NE/EN
JUL2729	N:42241	RH2241	07/27/B3	1928	5.24	1827	3640	244766	808720	0.50	72,63	-0.007	NS/SM
JUL2731	WH2242	WH2242	07/27/88	1950	5,11	1	2848	116327	339972	0.00	71.59	-0.005	NG/EM
JUL2732	H12243	MHZZ43	07/27/BB	2000	5.10	301	3285	127084	423240	0.09	72.06	-0.003	NG 'EM
JUL2714	MH2222	HH2222	07/27/88	1646	5.01	374561	323032	171221	575892	1.16	69.57	2.840	MB154

# TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE: \*.

SITE: HER CASE: 2240 DATE: 08/31/88

AREA 0	CLIENT SAMPLE 0	AMALYSIS Date time	NATIVE RATIO	SURROGATE ACC	TCDO CONC.	RERUM Code	VALID Code	UNITS	COMMENTS
METHBLANK	METHBLNK	07/27/88 153	5 0.33+	67.25	0.300 U			MS/SM	
SOTLBLANK	OCL34322	07/27/88 155	3 0.32+	68.64	0.300 U			NG/BM	
SDILSPIKE	OCL35612	07/27/88 160	3 1.17	77.56	0.820			NG/GH	
SOIL PE	PE-A	07/27/88 161	4 1.21	68.64	0.746			WG/GM	
WH2240	NH2240	08/24/88 140	1 1.01	78.97	0.612			MB/GM	UNITS OF NG PER SAMPLE

# **QUALIFICATION FLAGS:**

- # 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
- \*\* SURROBATE OUTSIDE OF ACCEPTABLE RANGE
- \*\*\* HIGH DETECTION LINIT

# RERUN CODES:

- A AUTOMATIC REPUN
- R REQUESTED RERUN

# SC/MS/MS WORKSHEET REPORT FORM

SITE: HER CASE: 2240 DATE: 08/22/88

LAB AMPLE #	AREA 8	CLIENT SAMPLE 0	ANALYS Date	SIS TIME	SAMPLE AMOUNT		ION 259	ION 263	ION 268	RAT10 257/259	SURR ACC	RAW UNITS VALUE
JUL2708 UL2709	METHBLANK SGILBLANK	HETHBLNK OCL 34322	07/27/88		5.00 5.00	2517 2570	7694 8164	336444 329847	1200593 1153 <b>25</b> 8	0.33	67.25 68.64	-0.003 NG/SM -0.001 NG/SM
UL2710	SOILSPIKE	OCL35612	07/27/88		5.00	284452	242839	482637	1484029	1.17	77.56	0.820 NG/6H
JUL2711 "U61809	SOIL PE WH2240	PE-A WH2240	07/27/88 08/24/88		5.00 1.00	122783 24750	101806 24456	199367 264564	692449 803233	1.21 1.01	68.64 78.97	0.746 NG/GH 0.612 NG/GH



# TMS ANALYTICAL SERVICES, INC.

6376 Morenci Trail Indianapolis, Indiana 46268 317-291-5697

TODE FIRST DOTA REPORT SHEET

FILE RECEIVED TIME:

SITE: MER CASE: 0705 DATE: 08/01/E8

	C_18N*	A) ALYSIS	NATIVE	6/15602£1E	TCBB	REBUN	VALIE	BTIFU	COMMENTS
APEA #	SAMPLE #	BATE TIPE	FATIC	40C	28%2.	2255	CODE		
HETHELAN"	METHBLAF	07128788 111	6 0.79#	78.55	0.300 U			MB (GM	
SOILBLAN	GCL3455%	07/26/68 112	6.15#	73.75	1,300 1			NS/GF	
SCHLSFIRE	GCLZ5548	07/08/89 112	1.15	54.77	6.507			N6/65	
SCI_ FE	FE-6	07/28/88 114	1.10	14,72	6.742			NB - BH	
#-2244	B40244	67129/88 131	0.00#	75.07	3,30 1 2			NG/GM	
¥~2245	#42245	17/08/EB 170	3 9,22+	72,57	4,300 3			N5/6"	
¥42045	W-224=	07/28/68 137	0.33+	49.05	0.30/ 0			N8/6K	
4-2747	KH2247	07128 E9 134	4 0.55*	65.70	0.30. 8			NE/G:	
WH2249	k42245	07/25/88 135	5 1.15	69.39	0.723			NG/SM	
M42250	#H2251	67/25/E5 147	5 1,17	66.4t	(., 752			NG/64	
MH1252	MACIZI	67/28/88 141	6 1.17	&B.01				NG / G>	
k42256	k:325:	67/28/98 142	7 0,57#	67.91	0,701.8			요즘 / 중변	UNITE OF HE FER EATFLE
¥42257	482057	47/29/99 143	7 1.27	£8.9.	1,74.			M3/84	
¥F1258	NH1258	17/28/58 144	1,15	67.07	1.476			"3/5#	
#F 2059	M-2259	+7/29 'ES 145	1.17	60.00	6.9-			NG / GM	
4-2253	¥402c7	(7/08/58 :51	1.14	65.37	4.4.7			NG/SM	
442554	6-0264	07/28/88 151	1.12	\$9.0T				N9/64	
¥-0265	K-Mat	07/08/85 153	6.054	67.Js	0.300 L			13/6K	
¥-22&7	KH0294	67/09/99 154	1.10	£9.9£	6.764.0			NG /6"	
#H2271	¥52571	17/28/89 155	1.15	49,65	759			NSZER	
WH2271	k-0270	77728/88 1e <sup>5</sup>	1.15	76.05	(,695			ME VEN	
k#2277	₩ 2277	67/28 88 181	1.15	65.24	0.584			NS/6*	
₩42277	k42271	(7:03/53 182	1.11	71.51	0.539			NS.16#	
242272	4-007E	17/28 BB 160	1 [.]2	70,65	1.712			NS/6*	

#### OCALIFICATION FLAGE.

- \* 257/25P PATES SLISEE OF ACCEPTABLE RANGE
- \*\* SUFFIGATE OUTSIDE OF ACCEPTABLE RANGE
- \*\*\* HIBH DETECTION LIMIT

# PERUN CODES:

- A AUTOMOTIC REPUN
- F REQUESTED FERMA

51°E: : EF C\*55: /\*716 DATE: (58/01/88

UPRIGATE COLD 6.05 AF MATINE 1.139 IDN PATIO: 1.009 TO 1.233 UNERGOL STO 5000 1.05 PR SUFFICACE DURING CORRECTION FACTOR: 0.010

CLIENT a4411573 5549LS 10% 257 10N 259 10N 243 10% 268 PATIO SUFF 50'. 0.013 FAMFLE & AFEA & EATE SAYPLE # 257/259 VALUE .012892 PETHELANK METHELMY 07/28/88 1116 5,79 2100 2881 199567 609632 0.79 78.50 -9,000 NB/68 07/25/88 1127 5.00 446799 -0.005 NG/5M JUL2893 SCILBLARK 9CL34550 461 2958 137727 0.15 73.99 4512964 SBILSPIKE 00135566 07/28/83 1139 5,00 91435 79570 165304 491218 1.15 E0.77 0.603 48/65 (7/28/89 114¢ 5.90 51020 467AR 67460 0.740 NE/EM JUL2895 SOIL PE PE-A 301726 1.10 76.72 982244 WKZ244 07/28/83 1311 5.23 3429 94750 75.97 0.004 83/6/ 3UL2806 . 102337 0.00 NH2245 PUL2807 WH2245 07/28/99 1323 5.15 2126 106770 351333 0,22 72.93 -0.005 NS/88 1374 5.09 71,2808 KH2246 NH2246 07/28/38 1987 6033 162526 573493 0.33 48.05 0.010 NS/GM 3395 JUL2509 ¥H2247 WK2247 07/28/89 1344 5.10 1973 115349 402758 0.58 δE.72 0.009 NS/85 1012510 WH2249 WH2249 07/28/88 1355 59156 50505 98351 337651 69.39 0.723 NG/BM 5.12 1.15 'ULIE1: \$42250 ⊭H2250 07/28/68 14%5 62730 73130 125206 448905 0.774 NE/EY 5.04 1.13 66.46 JUL2812 ¥42252 WH2252 07/28/83 1414 5.00 95469 81575 134447 470908 1.17 68.00 0.989 NG/GM 18F5813 KH2256 WH2256 07/28/83 1427 1.00 2730 4868 221913 784110 0.57 67.91 0.001 NG/BM JUL2814 ¥42257 117223 99311 340570 68.91 1.740 NG/64 WH2257 07/23/88 1437 5.10 141014 1.20 JUL2915 ¥H225B NH2258 07/28/89 1448 5.08 117824 101550 97318 342874 1.16 67.23 1.476 NE/GH JUL2916 WH2259 HH2259 07/28/88 1458 5.11 121602 107701 156805 540780 1.13 69.01 0.941 NG/85 JUL 2817 WH2263 WR2263 07/28/83 1505 82426 72327 232144 811764 6B.37 0.417 NG/6H 5.15 1.14 1012819 WF2234 WR2264 07/28/88 1519 5.12 30740 27517 163128 565685 1.12 67.07 0.216 MS/GM JUL2819 WH2266 -0.014 NE/EX WF7266 07/28/89 1530 5.05 1 1181 6769E 303437 0.00 69.36 IUL2820 NH2267 ₩H2267 07/28/89 1541 5.03 20609 112397 390372 65,96 0.215 NG/GH 18760 1.10 JUL2821 M12271 NH2271 07/28/88 1551 5.13 107640 91071 17713B 611586 1.18 69.06 0.729 NB/65 JUL2872 WP2272 137705 285663 972592 70.05 0.695 NB/6\* VH2272 07/28/88 1691 5.13 154189 1.15 101.2823 77005 186488 69.24 0.554 NG/6M WH2273 WH2273 07/28/88 1512 5.10 90858 642998 1.18 **RJL2824** WH2277 WH2277 07/28/68 1622 5.20 70978 63942 161953 549572 1.11 70.52 0.539 NS/6M JUL2825 ₩H2278 WH2278 07/28/88 1634 87097 173R07 575421 1.19 72.05 0.716 MB/6M 5.01 97452

# THE AMELITICAL SERVICES, INC

6376 Mineur Trad Indianapolis, Indiana 46268 317-291-5697

# TOTE FEMAL BACK REPORT SHEET

FILE PECSIVED DATE:

SITE: HEP CASE: 6725 DATE: 08/01/53

AREA #	CLIENT BAMPLE #	AMALYSIE DATE TIME	NATIVE RATIO	SLAPDSATE AGC		FERUN CODE	VALIO E000	UNITS	27/2HP02
METHPLANY	METHBLNK	07/29/28 105	0.00*	83,32	0.300 8			NG/8M	
SOILBLANK	BCL34506	07/29/68 130	4 0.41#	73. <b>8</b> 3	0.300 0			NS/6%	
BOILEPIKE	OCL35569	07/29/89 131	5 1.21	79.40	0.779			NG/6M	
SOIL PE	PE-B	07/29/69 132	8 1.17	70.01	3.550			NS/SN	
KH2280	WH2280	07/29/82 134	2 0.25*	69.45	0.300 U			NG/6M	UNITS OF NO PER SAMPLE
#H2791	WH2281	07/29/89 135	6 0.27#	69.55	0.300 U			NS/GM	UNITS OF NO PER SAMPLE
¥H2192	NP2282	07/29/88 140	8 1.1:	44.78	0.575			NG/6M	

# QUALIFICATION FLAGS:

- + 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
- \*\* SURROGATE DUTSIDE OF ACCEPTABLE RANGE
- \*\*\* HIGH DETECTION LINIT

# RERUN CODES:

- A AUTOMATIC RERUN
- R REQUESTED RERUN

# COMPRIME LADE ENDET REFORM FORM

5175: HER CASE: 6724 DATE: 08/01/85

LAS SAMPLE #	AREA #	CLIENT SAMPLE #	141E 4**#718	15 71 <b>7</b> 5	SAMPLE ANOUNT	10% 257	10V 259	184 253	103 259	PATIO 257/259	SCSP ACC	RAW VALUE	UL ETS
3012902	METHELANK	KETHOLM	07/29/89	1250	5,60	1	5413	317701	915137	0.00	83,32	-0.009 50	3/6K
JUL2903	SCILELANK	BCL34506	07/29/85	1704	5,00	2592	5479	242822	788753	0.41	73.88	0.005 NB	5/6#
JUL 2904	SCILSPIFE	00135569	07/29/83	1315	5.00	94455	77816	169545	509400	1.21	75.40	0.779 N	G/GH
JUL2505	SOIL PE	PE-B	07/29/66	1328	5.60	438172	366836	180547	534177	1.19	70.01	3.550 N	G/GM
JUL2905	¥H2280	KH2280	07/29/83	1342	1.00	2222	7992	335638	1159930	0.28	£9.45	-0.010 N	E/6#
JUL2907	¥∺2281	WH2281	07/29/68	1356	1.00	1342	4897	181852	627452	0.27	69.55	0.003 N	6/6M
JUL2908	₩H2282	MH2282	07/29/86	1408	5.24	28346	25628	57278	204757	1.11	66.78	0.575 N	S/GN

# TODO FINAL DATA REPORT SHEET

FILE	FECE	IVEL	DATE:
C1 0	Dena	21:22	TIME.

517E: hE= CASE: 0728 DATE: 08/12/88

AFEA #	CLIENT SAMPLE #	AFALNSIS OFTE TIME	94719 324-322	56110 332/334	SURFOSATE ACC	TOBO SONO.	RERUN CODE	GIJAV 3020	UNITE	CDAKENLE
HFIR #	SHAPLE 9	EF E TIME	32121	225,434	465	SURF	CODE	Live		
METHELANY	METHELAN	(E/01/89 211)	1.00+	0.79	72.02	0.300	U		NG/6"	
SDILBLAN*	SETTBENE	/B/01/98 214:	1,00€	0.79	72,40	0.300	J.		NG/6M	
SGILSPIKE	SOLLSPKE	05/01/88 2219	0.78	0.79	80.56	(.818			ME16#	
PE-A	PE-A	02/01/58 7250	7.75	5,79	71.34	0.765			45/6M	
KH2560	¥42050	09/61/98 230:	0.77	0.79	72-11	0.975			NG/6M	
¥H2061	N-12051	(9/02/85 0/0)	0.45	6.75	51.20	1.627			43/6M	
#40105	KH2105	08/62/89 0034	0,77	0.90	73.12	0.385			NG 1GM	
N-2109	MH2104	1-3/05,88 640,	0,76	0.78	75,29	9.424			NE (BP	
#42110	R42110	68/02-23 614	0.75	0.80	77.34	0.430			NG/GM	
¥42126	¥42128	18/02/88 0214	0.75	0.80	71.75	3.871			NG/8M	
WH2127	MH2127	08/02/28 024	9,77	0.89	70.78	2.094			NG:6*	
\$4210E	WH2128	08/02/88 632	6.78	6,79	72.23	3,139			NG/6M	
M-2287	WH2287	08/02/8B 642	0.76	6.79	71.92	0.300	U		NG/6M	
##2289	MH2289	68/02/89 050	(,85	9.80	71.13	0.300	บ		ME/EM	
¥42305	NF2305	08/02/88 053	0.78	6.79	75.10	3,077			K6/65	
£4030€	NH2305	08/02/99 060	0,70	0,79.	71.65	9,940			NE / 61	
¥#2307	M-2307	08/02/88 064	0.77	6,80	71.34	2,503			NG/BM	

# BLALIFICATION FLASS:

- \* 320/322 OF 332/374 PATIC DUTBIDE OF ACCEPTABLE PAYSE
- \*\* SURPOSATE DUTSIDE OF ACCEPTABLE FANGE
- \*\*\* HIGH RETECTION LIMIT

- RERU' CGDES: A AUTOMATIC RERUN R REQUESTED RERUN

SPECIAL INSTRUCTIONS (IF 4000)

# व राज्य । एक्सा स्थल एक

5175: HER C485: C725 E676: 18172755

_33	CLIENT	SAMPLE	TDN 320	10% 321	169 725	16 / 332	134 334	94110	PAT10	9548	54-
PAMPLE # AREA I	SAMPLE #	ANGUNT						326/322	332/334	304	74775
4HERCO3A METHBLA	ANY METHBLMS	5.00	1	1	189175	434647	548437	1.00€	0.79	72.92	0.000 45/64
44ERCO4A SOILBLA	WK SOILBLW	5.00	1	1	172332	280007	352558	1.00+	0.79	72.49	0.000 %5/5%
ARERCOSA SOLLSPI	IKE SOTLSPKE	5.00	44433	57233	120905	247544	311963	0.78	0.79	30.55	0.515 NB/64
4HERCOSA PE-A	PE-A	5.00	50350	66734	128558	295546	375909	0.75	0.79	71.34	0.785 NG/6M
4HERCO7A WH2040	#H1090	5.06	91316	116079	184954	421735	532976	0.77	0.79	72.11	0.976 NG/EM
4HERCOBA WH2061	WH2061	5.07	6629	9765	9806	19213	25591	94.0	0.75	81.20	1.627 NG/SM
4HERCO9A WH2108	WF2168	5.04	15583	20229	8:430	184631	231349	0.77	0.80	73.12	0.385 NG/GH
*HERCIOA NH2109	WH2109	5.21	173B4	22741	60330	179743	229553	0.76	0.78	73.29	0.424 NE/64
4HERC11A WH2110	WH2110	5.04	29763	39818	142102	320491	403066	0.75	0.80	73.34	0.430 NS/6M
4HERC12A WH2126	NH2126	5.20	85198	112977	43493	98460	123163	0.75	0.80	71.75	3.871 MG/6M
4HERC13A WH2127	WH2127	5.07	110175	143793	163102	239274	299250	0.77	0.80	70.78	2.094 NG/SM
HHERC14A WH212B	WHZ128	5.00	169164	217412	108950	243872	310731	0.78	0.79	72.23	3.139 NG/GM
4HERC16A NH2287	WH2287	5.06	8758	11503	141580	324317	412133	0.76	0.79	71.92	0.122 NG/6M
4HERC17A WH2289	NH2289	5.03	983B	11029	62418	145378	182600	0.89	0.80	71.13	0.285 NG/GM
4HERC1BA MH2305	NH2305	5.04	70570	90729	47786	103635	130519	0.78	0.79	75.10	3.077 NG/BM
4HERC19A WH2306	WH2306	5.19	64145	81540	128131	294204	371468	0.79	0.79	71.65	0.949 NG/6M
4HERC20A WH2307	WH2307	5.03	114683	148568	91033	208452	262280	0.77	0.80	71.34	2.503 NG/BM

#### TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE: FILE RECEIVED TIME: SITE: HER CASE: 0803 DATE: 08/09/88

	CLIENT	ANALYSIS	RATID	RATIO	SURROBATE	TCDD RER	UN VALID	UNITS	COMMENTS
AREA #	SAMPLE #	DATE TIME	320/322	332/334	ACC	CONC. CO	DE CODE		
						••••			
METHBLANK	METHOLNK	08/02/88 1054	1.00*	0.79	71.96	0.300 U		NG/GM	
SDILBLANK	SCILBLAK	08/02/88 1127	1.00#	0.79	73.99	0.300 U		NS/SM	
SOILSPIKE	SOILSPKE	08/02/88 1201	0.76	0.80	82.47	0.798		NG/GM	
PEA-2	PEA-2	08/02/88 1234	0.78	0.79	74.17	0.670		NG/GM	
WH2311	WH2311	08/02/88 0804	0.74	0.79	73.33	0.300 U		NG/GM	
WH2312	WH2312	08/02/88 0840	0.61=	0.80	76.06	0.300 U		NG/GH	
WH2313	NH2313	08/02/88 0913	0.70	0.81	71.97	0.519		NG/GM	
WH2314	NH2314	08/02/8B 0947	0.76	0.77	76.44	2.849		NG/GM	
WH2316	WH2316	08/02/88 1020	0.77	0.80	71.39	2. B14		NG/SN	
WH2317	WH2317	08/02/88 1308	0.74	0.80	72.81	2.875		NG/GM	
WH2318	WH2318	08/02/88 1342	0.79	0.80	74.79	3, 183		NS/GM	
WH2319	WH2319	08/02/88 1415	1.00+	0.79	70.23	0.300 U			IS OF WG PER SAMPLE
WH2320	WHZ320	08/02/88 1609		0.81	71.22	0.300 U			S OF NG PER SAMPLE
MH2063	HH20A3	08/02/88 1522		0.77	77.99	1.004		MR/RM	

# QUALIFICATION FLAGS:

- . 320/322 OR 332/334 RATIO OUTSIDE OF ACCEPTABLE RANGE
- \*\* SURROSATE OUTSIDE OF ACCEPTABLE RANGE
- \*\*\* HIGH DETECTION LINIT

# RERUN CODES:

- A AUTOMATIC RERUN
- R REQUESTED RERUN

SPECIAL INSTRUCTIONS (IF ANY):

# LR/GC/MS WORKSHEET REPORT FORM

51TE: HER CASE: 0803 BATE: 08/09/88

SURROGATE CONC 0.06 RRF NATIVE 1.110
INTERNAL STD CONC 1.05 RRF SURROGATE 1.336

LAB SAMPLE #	AREA 4	CLIENT SAMPLE 4	SAMPLE AMOUNT	10M 320	10M 322	ION 328	10N 332	10N 334	RATIO 320/322	RATIO 332/334	SURR ACC	RAW VALUE
4HERF26A	METHBLANK	METHBLNK	5.00	1	1	159695	365506	465351	1.004	0.79	71.96	0.000 NS/SN
4HERF27A	SCILBLANK	SOILBLNK	5.00	1	1	B3438	186820	235363	1.00*	0.79	73.99	0.000 NG/SM
4HERF28A	SBILSPIKE	SOILSPKE	5.00	46391	60980	134337	268463	337430	0.76	0.80	82.67	0.798 NG/GM
4HERF29A	PEA-2	PEA-2	5.00	33333	42749	101636	225270	285829	0.78	0.79	74.17	0.670 NG/GM
4HERF21A	WH2311	WH2311	5.07	12739	17131	114987	257797	328453	0.74	0.79	73.33	0.226 NG/6M
4KERF22A	WH2312	WH2312	5.15	6824	11233	57509	125113	157471	0.61+	0.80	74-06	0.279 NG/GM
4HERF23A	WH2313	NH2313	5.03	20801	29847	84270	194982	241766	0.70	0.81	71.97	0.519 NB/6M
4HERF24A	WH2314	WH2314	5.18	78372	102959	57408	120279	156344	0.76	0.77	76.44	2.849 NS/GN
4HERF25A	WH2316	WH2316	5.08	117534	152641	82522	187149	236416	0.77	0.80	71.39	2.814 NG/6M
2HERF30A	WH2317	MH2317	5.15	219649	287752	152631	342208	429255	0.76	0.80	72.81	2.875 NG/GM
4HERF31A	WH2318	WH2318	5.05	139560	177401	90291	197825	246168	9.79	0.80	74.79	3.183 NG/GM
4HERF32A	WH2319	WH2319	1.00	1	1	202797	477660	603333	1.00*	0.79	70.23	0.000 NB/6M
SHERA01A	WH2320	WH2320	1.00	1	1	117866	277020	342550	1.00#	0.81	71.22	0.000 NG/GM
4HERF34A	WH2063	WH2063	5.07	77470	96079	150473	334432 ·	432881	0.81	0.77	72.99	1.004 NS/GM

# TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE: FILE RECEIVED TIME: SITE: WER CASE: 0802 DATE: 08/08/88

AREA D	CLIENT SAMPLE #	ANALYSIS DATE TIME	RATED 320/322	RATIO 332/334	SURROGATE ACC	TCBO CONC.	RERUN Code	VALID CODE	UNITS	CONMENTS
METHBLANK	METHBLINK	08/03/88 1951	1.00+	0.80	71.28	6.300 E	J		NS/SM	
SDILBLANK	SOILBLNK	08/03/88 1925	1.00+	0,80	72.07	0.300 L	ŧ		NG/GM	
SBILSPIKE	SOLLSPKE	08/03/88 1959	0.79	0.80	81.93	0.821			NG/GM	
PE-B	PE -B	08/03/88 2033	0.79	0.81	70.03	3,430			NG/GM	
WH2260	WH2260	08/03/88 2107	0.76	0.79	72.28	0.847			NG/6M	
WH2261	WH2261	08/03/88 2141	0.76	0.79	70.23	1.476			NS/6M	
WH2262	WH2262	08/03/88 2215	0.81	0.79	70.51	1.255			NG/EM	

# QUALIFICATION FLAGS:

- . 320/322 OR 332/334 RATIO OUTSIDE OF ACCEPTABLE RANGE
- \*\* SURROGATE DUTSIDE OF ACCEPTABLE RANGE
- \*\*\* HIGH DETECTION LIKIT

# RERUN CODES:

- A AUTOMATIC RERUN
- R REQUESTED RERUN

SPECIAL INSTRUCTIONS (IF ANY):

#### LR/GC/MS WORKSHEET REPORT FORM

SITE: HER CASE: 0802 DATE: 08/08/88

SURROGATE CONC 0.06 INTERNAL STD CONC 1.05 RRF NATIVE 1.110
RRF SURROGATE 1.336

CLIENT ION 320 EON 322 FON 328 FON 332 FON 334 RATIO RATIO SURR RAM SAMPLE . AREA . SAMPLE 4 ANDUNT 320/322 332/334 ACC VALUE 0803C04A METHBLANK METHBLNK 5.00 t 120424 281155 35134B 0.80 0.000 NG/6M 1.00# 71.28 0803C05A SOILBLANK SOILBLNK 5.00 119050 275187 343236 1.004 0.80 72.07 0.000 NG/GM 0803C06A SDILSPIKE SDILSPKE 5.00 73184 92597 199828 405225 504122 0.79 0.80 81.93 0.821 NG/SH 0803C07A PE-B PE -B 5.00 220066 280492 118653 277326 343514 0.79 0.81 70.03 3.630 NB/BM 0803C08A WH2260 NH2260 4.98 41051 54016 96237 219336 276601 0.867 NG/6M 0.76 0.79 72.28 0803C09A NH2261 HH2261 5.00 65240 86225 87456 204175 257902 0.76 0.79 70.23 1.476 NG/6M 0803C10A WH2262 WH2262 79544 5.03 120450 2B0B47 98401 353970 0.81 0.79 70.51 1.255 NG/6K

# TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE: FILE RECEIVED TIME: SITE: HER CASE: 0805 DATE: 08/07/88

AREA I	CLIENT SAMPLE #	ANALY! Date	SIS Time	NATIVE RATIO	SURROGATE ACC	TCDB CONC.	RERUN Code	VALI <b>D</b> Code	UNITS	COMMENTS
METHBLANK	HETHOLNK	08/08/88	1454	1.00€	AB.75	0.300 U			NG/GM	
SOILBLANK	DCL34506	08/08/8B	1506	0.59#	46.98	0.300 U			WG/SM	
SOILSPIKE	OCL35539	08/08/88	1517	1.17	77.70	0.804			NG/GH	
SOIL PE	PE-A	08/08/88	1528	1.17	46.45	0.711			NG/6M	
WH2293	WH2293	08/08/88	1538	1.16	62.84	0.387			NG/GM	
WH2294	NH2294	08/08/88	1548	1.17	43.74	0.300 U			MS/SM	
¥H2295	WH2295	08/08/88	1401	1.11	46.15	0.300 U			N6/6K	
NH230B	WH2308	08/08/88	1611	1.19	43.45	0.603			NG/GM	
WH2309	WH2309	08/08/68	1622	1.07	64.11	0.300 U			NG/GK	
WH2310	WH2310	08/08/88	1834	1.22	45.02	0.894			M6/6M	
WH1423	NH1423	08/08/88	1646	0.19#	66.65	0.300 U			NG/GM	UNITS OF NO PER SA

# **QUALIFICATION FLAGS:**

- \* 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
- \*\* SURROGATE OUTSIDE OF ACCEPTABLE RANGE
- \*\*\* HIGH DETECTION LIMIT

#### RERUN CODES:

- A AUTOMATIC RERUN
- R REQUESTED RERUN

# SC/MS/MS WORKSHEET REPORT FORM

SITE: MER CASE: 0805 DATE: 08/07/88

SURROGATE CONC 0.06 INTERNAL STD CONC 1.05 RF NATIVE 2.109 RF SURROGATE 2.083 ION RATIO: 1.009 TO 1.233 CORRECTION FACTOR: 0.010

LAB SAMPLE #	AREA 4	CLIENT SAMPLE #	ANALYS Date	ES TIME	SAMPLE Amdunt	ION 257	10N 259	ION 263	10N 26B	RATIO 257/259	SURR	RAN Value	UNITS
AU60812	METHBLANK	METHBLNK	08/08/88	1454	5.00	i	1	103217	360345	1.00	68.75	-0.023	NG/GH
AU60813	SDILBLANK	DCL34506	08/08/88	1506	5.00	7380	12445	304305	1090034	0.59	66.98	0.020	NG/GM
AUS0814	SOILSPIKE	DCL35539	08/08/80	1517	5.00	173952	148698	301323	924956	1-17	77.70	0.804	NG/6M
AUG0815	SOIL PE	PE-A	08/08/88	152B	5.00	120924	103202	201746	723967	1.17	66.45	0.711	NG/6X
A180816	WH2293	NH2293	08/08/88	153B	5.01	76094	45813	215423	819656	1.16	62.84	0.387	NG/GN
AUG0817	WH2294	NH2294	08/08/89	1548	5.03	51984	44618	189415	711095	1.17	63.74	0.297	NG/GH
AUG081B	¥H2295	WK2295	08/08/88	1001	5.10	71095	63850	345295	1250074	1.11	66.15	0.229	NE/SM
AUG0819	NH2308	WH230B	08/08/88	1611	5.07	103480	87260	189473	712503	1.19	63.45	0.603	NG/GM
AUG0820	WH2309	WH2309	08/08/88	1622	5.09	48662	45372	188219	702602	1.07	64.11	0.289	NG/GM
AU60821	NH2310	WH2310	08/09/88	1634	5.09	69157	56817	87734	321062	1.22	65.02	0.874	NG/GH
AUG0822	WH1423	¥H1423	08/08/88	1646	1.00	1395	73BB	324936	1169996	0.19	66.65	-0.025	N6/6M

# TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE: FILE RECEIVED TIME: SITE: HER CASE: 0811 DATE: 08/10/88

AREA \$	CLIENT SAMPLE #	ANALYSIS DATE TIM		SURROBATE ACC	TEDD CONC.	RERUN Code	VAL10 CODE	UNITS	COMMENTS
METHBLANK	METHBLMK	08/11/88 1	613 1.00=	87.82	0.300 U			WG/GH	
SOILBLANK	DCL34504	0B/11/B8 1	62B 0.65#	80.93	0.300 U			NG/GM	
SOILSPIKE	OCL35562	08/11/88 1	642 1.13	89.52	0.788			NG/GM	
SOIL PE	PE-A	08/11/88 1	653 1.15	77.50	0.741			MS/GH	
WH2321	WH2321	08/11/88 1	705 1.15	73.82	1.775			MG/GH	
H2322	WH2322	08/11/88 1	716 1.16	75.84	3.482			NG/GM	
H2324	HH2324	08/11/88 1	727 1.18	77.38	2.388			NG/8H	
MH2325	WH2325	09/11/88 1	738 1.17	70.93	2.654			NG/GH	
H2326	WH2326	08/11/88 1	749 1.18	71.47	10.427			NG/GM	
H2327	WH2327	08/11/88 1	759 1.17	70.86	5, 985			W6/6H	
H2328	WH2328	08/11/88 1	809 1.17	73.10	11.397			WG/GH	
H2329	WH2329	08/11/98 1	820 1.16	69.91	3.465			MG/GM	
#H2330	WH2330	08/11/88 1	832 1.18	76.73	3.232			NG/GM	
WH2332	HH2332	08/11/88 L	843 1.16	67.29	2.863			NG/GH	
M2333	WH2333	08/11/BB 1	853 1.18	71.25	4.997			NG/GM	
VH2334	WH2334	08/11/88 1	904 1.05	71.70	0.335			M6/6%	
H2336	WH2336	09/11/88 (	915 1.09	73.25	0.334			MG/GH	
WH2337	WH2337	08/11/88 1	926 1.13	74.95	0.372			NG/GH	
WH2338	NH2338	08/11/88 1	937 0.021	74.20	0.300 U			NG/GK	UNITS OF NG PE
H2339	NH2339	08/11/88 1	948 <b>0.</b> 00#	72.52	0.300 U			MG/GH	UNITS OF NG PE

# QUALIFICATION FLAGS:

- 4 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
- \*\* SURROGATE OUTSIDE OF ACCEPTABLE RANGE
- \*\*\* HIGH DETECTION LINIT

#### RERUM CODES:

- A AUTOMATIC RERUN
- R REQUESTED RERUN

# GC/MS/MS WORKSHEET REPORT FORM

SITE: HER CASE: 0811 DATE: 08/10/88

SURROGATE CONC 0.06 INTERNAL STD CONC 1.05

RF MATIVE 2.109 RF SURROBATE 2.083 ION RATIO: 1.009 TO 1.233 CORRECTION FACTOR: 0.010

LAB		CLIENT	ANALYS	is	SAMPLE	ION 257	10N 259	10N 263	IDN 268	RATIO	SURR	RAN	UNITS
SAMPLE (	AREA #	SAMPLE #	DATE	TIME	AMOUNT	ſ				257/259	ACC	VALUE	
AU61104	HETHBLANK	HETHBLNK	08/11/88	1613	5.00	1	t	146790	401149	1.00	87.82	-0.023	NG/SM
AU61105	SOILBLANK	DCL34504	08/11/88	1628	5.00	2121	3284	159641	473367	0.65	80.73	0.004	NG/GM
AUG1106	SOILSPIKE	OCL35562	08/11/88	1642	5.00	101159	89736	209427	558512	1.13	89.52	0.788	MG/GM
AU61107	SOIL PE	PE-A	08/11/88	1653	5.00	97360	84626	183421	564729	1.15	77.50	0.741	NG/GM
AU61108	WH2321	WH2321	09/11/88	1705	4.78	157465	136549	121461	389381	1.15	73.82	1.775	MG/GM
AUS1109	H12322	WH2322	08/11/88	1716	5.14	514726	447097	195236	600205	1.16	75.84	3.682	NG/GH
AUG1110	HH2324	WH2324	08/11/88	1727	4.96	132811	112147	79744	242881	1.18	77.3B	2.388	NG/GM
AU61111	WH2325	WH2325	08/11/88	173B	4.92	600117	512077	302346	1001152	1.17	70.93	2.654	MG/GH
AUG1112	WH2326	WH2326	08/11/88	1749	4.94	2717394	2311133	373213	1154760	1.18	71.47	10.427	NG/6M
AUG1113	H12327	WH2327	08/11/88	1759	4.87	1836783	1565514	425186	1372819	1.17	70.86	5.985	NG/6M
AUS1114	WH2328	MH2328	08/11/88	1807	5.01	2588727	2211335	230880	994600	1.17	73.10	11.397	NG/GM
AU61115	M2329	NH2329	08/11/88	1820	5.02	593095	511369	224238	747866	1.15	69.91	3.465	NG/GM
AUG1116	WH2330	MH2330	08/11/88	1832	4.74	423782	358993	189087	577128	1.18	76.73	3.232	N6/6H
AUS1117	M12332	W12332	08/11/88	1843	5.10	567191	488020	244475	850131	1.16	67.29	2.863	MG/EX
AUS1118	MH2333	WH2333	08/11/88	1853	4.99	1814872	1541033	491420	1589143	1.18	71.25	4.997	NG/GH
AUG1119	WH2334	WH2334	08/11/88	1904	5.05	83690	79671	320874	1070960	1.05	71.70	0.335	NG/GH
AUG1120	MH2336	WH2336	08/11/88	1915	4.97	57724	53025	226257	739314	1.09	73.25	0.334	NG/GM
AUG1121	WH2337	WH2337	08/11/8B	1926	5.06	36442	32140	127483	406941	1.13	74.95	0.372	NE/GH
AUG1122	MH2338	NH2338	08/11/88	1937	1.00	89	4026	161263	521622	0.02	74.20	-0.021	NG/BH
AUS1123	WH2339	WH2339	08/11/88	1948	1.00	1	4846	150611	498443	0.00	72.52	0.001	NG/GM

# SC/MS/MS WORKSHEET REPORT FORM

SITE: HER CASE: 0815 DATE: 08/17/88

SURROGATE CONC 0.06 RF MATIVE 2.109 ION RATIO: 1.009 TB 1.233
INTERNAL STB CONC 1.05 RF SURROGATE 2.083 CORRECTION FACTOR: 0.010

LAB Sample #	AREA #	CLIENT SAMPLE #	ANALYSIS Date ti	-	AMPLE Hount	10N 257	ton 259	ION 263	TON 268	RATIO 257/259	SURR ACC	RAW VALUE	UNITS
AUG1637	METHBLANK	METHBLNK	08/16/88 1	1829 5.	.00	4005	12406	300051	983839	0.48	73,18	0.021	NG/SK
AU6163B	SOTLBLANK	OCL34575	08/16/98	1841 5.	.00	7107	9229	278863	922829	0.77	72,50	0.019	NG/GH
AUG1639	SOILSPIKE	OCL35562	0B/16/8B	1953 5.	.00	278664	240842	518006	1455951	1.16	84.89	0.823	NG/GM
AU61540	SOIL PE	PE-A	08/16/88	1904 5	.00	152168	131215	252739	835892	1.16	72.09	0.781	NG/EH
AUG 1 641	BH2372	WH2372	08/16/88	1916 5.	.07	49050	46610	303555	1010936	1.05	71.94	0.199	NS/SIT
AUG1642	WH2373	WH2373	08/16/88 1	1930 5.	. 12	59283	53903	305338	1009433	1.10	72.44	0.237	
AUG1643	WH2374	NH2374	08/16/88	1942 5.	.11	64943	59624	280527	940090	1.09	71.46	0.285	
AU61644	WH2375	WH2375	08/16/88 1	1953 5.	. 11	324859	280430	329565	1113455	1.16	70.28	1.239	NG/SM
AUG1645	¥H2376	WH2376	08/16/88 2	2005 5.	.09	309928	264067	307437	1030682	1.17	70.91		NG/GN
AUG1646	M12377	WH2377	08/16/88 2	2016 5	. 07	370771	317231	358786	1186207	1.17	71.78		NG/SM
AUG1647	WH2378	WH2378	08/15/88	2027 5.	.03	229936	203605	349517	1172216	1.13	71.05	0.849	-
AU61648	WH2379	W12379	08/16/88 2	2038 5.	. 10	244769	213496	352038	1167032	1.15	71.85	0.890	
AU51649	WH23B0	WH2380	08/16/88 2	2049 5.	.02	182992	156015	241547	814686	1.17	70.58	0.960	
AUG1650	WH2381	WH2381	08/16/88 2	2100 1.	.00	6019	9671	364795	1216994	0.62	71,93	0.038	
12419UA	NH2382	WH2382	08/16/88	2111 1	.00	3089	11308	460953	1533205	0.27	72.15	-0.003	

# TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE: FILE RECEIVED TIME: SITE: HER CASE: 0819 DATE: 08/21/88

CLIENT ANALYSIS NATIVE SURROSATE TCDD RERUN VALID UNITS COMMENTS CODE CODE AREA # SAMPLE I CONC. DATE TIME RATIO ACE WH2286 WH2286 08/18/88 1428 1.12 77.23 1.621 NG/GH

# QUALIFICATION FLAGS:

- \* 257/259 RATIO DUTSIDE OF ACCEPTABLE RANGE
- \*\* SURROGATE DUTSIDE OF ACCEPTABLE RANGE
- \*\*\* MIGH DETECTION LINIT

# RERUN CODES:

- A AUTOMATIC RERUN
- R REQUESTED RERUN

# SC/MS/MS WORKSHEET REPORT FORM

SITE: HER CASE: 0819

DATE: 08/21/88

SURROGATE CONC 0.06 INTERNAL STD CONC 1.05 RF MATEVE 2.109 RF SURROGATE 2.083 IOM RATIO: 1.009 TO 1.233 CORRECTION FACTOR: 0.010

ANALYSIS SAMPLE 10N 257 10N 259 10N 263 ION 268 RATIO RAN UNITS CLIENT SURR LAB SAMPLE # AREA # SAMPLE # DATE TIME AMOUNT 257/259 VALUE AUG1811 WH2286 WH2286 08/18/89 1428 5.08 15238 13658 13371 41041 1.12 77.23 1.421 NG/GM

# TCOD FINAL DATA REPORT SHEET

FILE RECEIVED DATE: FILE RECEIVED TIME: SITE: HER CASE: 0822 DATE: 08/21/88

AREA #	CLIENT SAMPLE &	ANALYSIS DATE TIME	NATIVE RATIO	SURROGATE ACC	TCDD CONC.	RERUM Code	VALIO CODE	UNITS	COMMENTS
METHBLANK	HETHBLMK	08/22/88 1410	0.00*	76.97	0.300 U			NG/GM	
SOILBLANK	OCL34541	08/22/88 142	0.12#	75.71	0.308 U			NG/EN	
SOILSPIKE	OCL35548	08/22/88 1443	1.13	84.57	0.808			NG/SM	
SDIL PE	PE-A	08/22/88 1455	1.18	73.31	0.761			NG/GM	
WH2270	WH2290	08/22/88 1500	0.92	73.31	0.300 U			NG/GK	
WH2271	WH2291	08/22/88 1519	1.00=	73,71	0.300 U			NG/6H	
WH2292	WH2292	08/22/88 1533	0.93*	73.63	0.300 U			NG/GM	

# QUALIFICATION FLAGS:

- . 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
- \*\* SURROGATE OUTSIDE OF ACCEPTABLE RANGE
- \*\*\* HIGH DETECTION LIMIT

- RERUN CODES: A AUTOMATIC RERUN
- REQUESTED RERUN

# GC/MS/WS WORKSHEET REPORT FORM

SITE: HER CASE: 0822

DATE: 08/21/88

 SURROGATE CONC
 0.06
 RF NATIVE
 2.109
 ION RATIQ:
 1.09 70
 1.233

 INTERNAL STD CONC
 1.05
 RF SURROGATE
 2.083
 CORRECTION FACTOR:
 0.010

LAB		CLIENT	ANALY:	212	SAMPLE	ION 257	ION 259	10N Z&3	ION 268	RATIO	SURP	RAW	UNITS
SAMPLE 4	AREA 4	SAMPLE 8	DATE	TIME	AMOUNT					257/259	ACC	VALUE	
AUG2206	NETHBLANK	HETHBLMK	08/22/88	1410	5.00	1	2716	107562	335373	0.06	74.97	-0.007	NG/GM
AUS2207	SOILBLANK	OCL34541	08/22/88	1423	5.00	608	4979	162135	513943	0.12	75.71	0.002	NG/6M
AUG2209	SOILSPIKE	OCL35548	08/22/98	1443	5.00	101053	89265	192526	543148	1.13	84.59	0.808	NG/GM
AU62209	SOIL PE	PE-A	08/22/88	1455	5.00	156255	132734	268815	874467	1.18	73.31	0.761	NG/GM
AU62210	WH2290	WH2290	08/22/88	1508	5.03	14911	16129	197611	646436	0.92	73.31	0.090	NG/GH
AU62211	WH2291	WH2291	08/22/88	1519	5.09	18339	18327	218468	708746	1.00	73.91	0.098	NG/SM
AUG2212	WH2292	WH2292	08/22/88	1532	5.07	40206	43304	438085	1426466	0.93	73.43	0.114	NG/GN

#### TODO FINAL DATA REPORT SHEET

FILE RECEIVED DATE: FILE RECEIVED TIME: SITE: HEP CASE: 0909 DATE: 09/09/89

	CLIENT	AMALYSIS	NATIVE	SURROGATE	TCDD	RERUN	VALIO	UNITS	COMMENTS
AREA 9	SAMPLE #	DATE TIME	PATID	ACC	CONC.	CODE	CODE		
METHBLANK	HETHBLNK	09/09/88 151	3 0.92€	76.96	0.300 U			NS/GH	
SOILBLANK	OCL34541	09/09/B8 152	0.76*	77.71	0.300 U			NG/GM	
SOILSPIKE	0CL35528	09/09/88 154	1.11	84,44	0.845			NB/GK	
SOIL PE	PE-A	09/09/88 155	2 1.10	77.11	0.768			MG/GM	
WH2383	WH2383	09/09/88 160	0.95#	77.93	0.300 H			NG/GM	

# QUALIFICATION FLAGS:

- . 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
- \*\* SURROSATE DUTSIDE OF ACCEPTABLE RANGE
- \*\*\* HIGH DETECTION LIMIT

# RERUN CODES:

- A AUTOMATIC RERUN
- R REQUESTED RERUN

# GC/MS/MS WORKSHEET REPORT FORM

511E: HER CASE: 0909 DATE: 09/09/88

 SUPPOBATE CONC
 0.06
 RF HATIVE
 2.109
 ION RATIO:
 1.009 TO 1.233

 "MTERNAL STD COME 1.05
 RF SURROBATE 2.083
 CORRECTION FACTOR:
 0.010

IB . (MPLE 1	AREA 1	CLIENT SAMPLE D	ANALYSIS DATE TIME	SAMPL Andun		10N 259	ION 263	ION 268	FAT10 257/259	SURR AEC	RAW UNITS VALUE
TP0903 [P0904 SEP0905 CEP0906	METHBLANK SOILBLANK SOILSPIKE SOIL PE	METRBLNK OCL34541 OCL35528 PE-A	09/09/88 1513 09/09/88 1523 09/09/88 1544 09/09/88 1553	5.00 5.00 5.00	28740 7372 122969 50776	31370 9680 111076 46004	279565 20305B 226190 9376B	870873 626863 639151 290125	0.92 0.76 1.11 1.10	76.96 77.71 84.44 77.11	9.141 HG/6M 0.042 NG/6M 0.845 NG/6M 0.768 NG/6M
P0907	WH2383	WH2383	09/09/88 180/	5.02	5670	59B6	104564	321822	0.95	77.93	0.063 NG/6M

# APPENDIX C

# SUMMARY DATA REPORT FORMS

2,3,7,8-TCDD

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The following report forms for 2,3,7,8-TCDD analyses are extracted from analytical reports prepared by TMS Analytical Services, Inc. See Tables A-1 and A-2 (Appendix A) for identification and description of samples. The complete reports of these analyses are located in Volume IV.

FERN 9-15 TEDD SOIL DATA REFORT FORM Face 1 of 8

Lab: THS CNALVITCAL REPVILES

Report Cate: 7/30/89

CASE:SATEN MERCILES CRECA - 8,3.7,9-TOSS

Column: 898881: 51M / 0.85

ISCMER SPECIFIC FOR 2,3,7.3-1003

Instrucent ID: HP 59704SD

CLIENT Earpla Mober	Ertr. Date	let Nt.	ug/Fg Meas.	TCOD MFS	GC/MS Date	Analysis Time	
NH5037	7/20/88	5.01	2,02	H/A	7/30/98	2124	
.42035	7/20/38	5.05	1.93	1/4	7/30/88	2157	
866388	7/20/98	5.07	1.99	N/A	7/30/98	2231	
982943	7\50√58	5.01	1.55	27.6	7/30/88	5394	
M55083	7/20.98	5.16	2.74	H/A	7/30/88	2238	
PHE004	7/29/89	5.14	1.51	N/A	7/31/88	C011	
98098	7/20/88	5.14	1.24	M/A	7/31/88	0045	
HH2099	7/20/89	5.05	1.20	874	7/31/98	0119	
WH2090	7/20/89	5.94	1.11	3/4	7/31/93	0152	
WH2091	7/20/99	5.02	1.21	N/A	7/31/88	0225	

MB #3 = Method Blank

N N = Mative FCCO Scake

D = Publicate/Fortified Field Black FE FS = EMSE-EV Performance Evaluation Sample

MPC | Marinum Possible Concentration

FB = Field Plank

IS = Internal Standard

RR ≈ Resum

.D = Not Detected

RS = Recovery Standard

FORM 9-19 TODD SOIL DATA FEFORT FORM Page 2 of 2

Lib: THS ANALYTICAL SERVICES

Report Date: 7/30/98

CASE: EATCH PERCYLES 0780A - 2.3.7.8-1000

Column: SF2331; 60# Y 1.25

ISOMER SPECIFIC FOR 2.3.7.7-FORD

 $\subset$ 

Instrument ID: HP 5970MS2

CLIENT	.q	Rela esponse		e Aatios					!	Pesponse	(Area)		
Sample		3297		332/									
Myeter		355	•	33418	•		259	320	352	358	33215	33419	
HH8034	,	9.75		0.80	,		E9913	66783	37404	71643	155327	173016	
386548		0.77		9.75			15755	43724	55574	48342	104624	139950	
350586		0.79		^.77			12319	23310	15565	36014	77039	90167	
945045		4.78		0.74			5858	16775	21578	22174	17197	13852	
196341	,	6.78		0.80			11614	55449	32917	18429	41352	51918	
4H2054		0,73		0.77			5940	15445	25062	88488	45031	59752	
948983		9.84		0.78			5618	21995	65173	34559	74150	95523	
WHEC39		9.77		0.80			21500	61975	70184	108003	531530	Sādzāi	
482090		0.84		0.83		,	10000	23437	26:)08	#5 <b>4</b> 01	92271	113407	•
FH5041		9,39		2.76			10752	98035	24940	46272	100291	132425	

MB = Method Blank

N = Native TCDD Spike

D = Duclicate/Fortified Field Black

FE = EMSL-LV Ferformance Evaluation Sample

MFC = Marinum Possible Concentration

FB = Field Plank

IS = Internal Standard

FR = Rerun

HD = Not Detected

RS = Recovery Standard

FORM 3-18 TODD SOIL DATA REPORT FORM Page 1 of 2

Lab: TMS SNALYTICAL SERVICES

Report Date: 08/19/89

CASE:

Column: 392231: 50M X 0.25

ISCMER SPECIFIC FER 2,8.7,8-7000

Instrument ID: HP 5970MSD

CLIENT Sample Mumber	Extr. Date	Wet Wit.	ug/kg Meas.	TC2D MPS	GC/MS Date	Anaiysis Tige
JH2122	07/19/88	5.19	6.12	3/9	3/3/88	0302
WH2123	07/19/88	4.24	1.31	N/A	9/3/98	0334
WH2124	07/19/88	4.39	1.83	4/8	89/6/8	0410
H2125	07/19/68	4.94	2.78	N/4	3/3/69	0444

MB MB = Method Stank TB = Field Blank W = Native TODD Books
D = Nobicate/Fortified Field Slank IS = Internal Standary aa = Refun FE FE EMBLILY Performance Evaluation Sample ND = Not Datacted RS = Pecovery Standart

190 - 490 = Maismus Possible Concentration

C-3

FORM 9-15 TOOD SELL DATA REPORT FORM Page 2 of 2

Lab: TMS ANALYTICAL SERVICES Report Date: 69/19/99

CASE: Column: SPP231: 50% ( 0.25

ISCHER SPECIFIC FOR 8.3.7.8-TEDD

Instrument ID: HP 597CMSD

CLIENT Sample Number	. Relative .Resconse Ratios			 :			Response (Area)					
		320/ 322	•	332/ . 33415 .		259	320	322	323	33215	33415	
WH2122		0.77		0.79 .	 ,	48457	132173	172667	41981	95276	120905	
WH2123		0.75		0.79 .		17594	24243	35503	43603	97055	122579	
WH2124		0.90		0.90 .		2871	3545	3947	3622	8893	9926	
WH2125		9.81		0.75 .		8274	25595	32925	20794	41921	55783	

AB = Method Plank

H = Native FDDD Booke

D = Egglicate/Portified Field Blank

PE = EMBL-LV Performance Evaluation Gazzle

MPC = Maximum Possible Commentmetion

FB = Field Plank

IS = Internal Starcard

RR = Renus

-D = Not Detected

RS = Recovery Standard

FORM B-IS TODO SOIL DATA REPORT FORM

Page 1 of 2

Lab: THE ANALYTICAL SERVICES

Report Date: 08/18/88

CASE:

Column: 992931: 60M Y 0.85

:SBMEP SPECIFIC FOR 2,3,7,8-7000

Instrument ID: HP 5970MSD

Sample Number	Extr. Date	Wet Wt.	ug/kg Meas.	TCDD MPC	GC/MS Date	Analysis Time	
M2069	7/15/99	5.13	3.43	N/A	3/3/88	c517	
WH2051	7/15/88	5.97	4.19	N/A	8/3/88	0551	
MH5085	7/15/88	5.03	3.59	k/A	8/3/88	0625	
P662H#	7/15/88	5,10	2.27	N/A	9/3/99	0659	
¥H2087	7/15/89	5.01	1.87	N/A	8/3/88	0733	
MH5088	7/15/88	5.02	2.39	N/A	9/3/88	0897	
WH2092	7/15/88	5.13	1.56	N/A	9/3/88	0841	
WH2093	7/15/88	5.04	1.41	N/A	8/3/88	0914	
WH2094	7/15/68	5.07	1.00	N/A	8/3/83	0948	

N h = Nati e TODD Soixe
D D = Dunit-----D D = Duplicate/Scriffer Field Slank

FE FE = EMSL-u, Performance Evaluation Sample

MPC MPC = Maximum Possible Concentration

FE = Field Blan-

IS = Internal Standard

Re = Rerun

MO = Not Detected

RS = Recovery Standard

FORM 8-18 | TODG 8012 DATA REPORT FORM | Face 8 of 8

Lab: THE ANALYTICAL SERVICES

Recort Late: (8/18/88

CAEE:

0:11a++ 859291; apr + 1,25

TERMER SPECIFIC FOR ELEVINE-TODE

Instrugent ID: +\* E970KSD

CLIENT Sample Number	.5	. Ralative Rassonse Rasios				Resoonse /Area:							
		3207	•	332 <i>)</i> 33419			259	320	322	329	33215	334IS	
#H20B0	,	0.78		0.77			27485	84860	107312	46294	103169	139992	
WH2081		0.78		0.81			35228	102559	132260	49224	111468	127943	
MH5085		(.76		0.78			30497	c3513	121054	50133	117037	149190	
AH508F		0.75		0.80			50702	115343	154571	99789	235271	292512	
WH2027		6.72		0.78			12540	44415	£203£	48494	112551	143827	
WH2088		0.79		0.79			24254	70913	39404	54478	133243	1:7232	
Wn2092		0.71		0.79			13516	28461	25918	35939	70953	109800	
WH2093		0.76		6.79			16028	45072	59004	63276	146211	184279	
WF2094		0.84		σ <b>.8</b> 2			8610	27591	32766	50419	121438	14"477	

MB = Method Blank

N = Native TCDD Spike

D = Dublicate/Fortified Field Flank

PE = EMSL-LV Performance Evaluation Sample

MPC = Maxieum Possible Concentration

FB = Field Blank

IS = Internal Starpard

RR = Rerun

ND = Not Detected

RS = Recovery Standard

FORK SHIS TOOD SCIL DATA REPORT FORM Page 1 of 2

Labi THE AVALYTICAL REPVICES

Recort Date: 08/19/88

CASE: HEFO712P ISCHER SPECIFIC

Coluen: 898381; 607 1 (.85

ISCHER SPECIFIC FOR 8.3.7.8-7010

Instrument ID: HP 5970dSD

CLIENT Sample Number	Extr. Date	Wet Wt.	ug/kg Meas.	TCDD MPC	GC/MS Date	Analysis Time
WH2023	09/10/88	5.06	2.01	N/A	06/18/88	2107
WH2025	09/10/88	5.02	2.58	N/A	09/18/28	2140
AH5059	08/10/88	5.00	8.36	N/A	05/18/89	2213
242027	₹2/10/99	5.04	1.01	N/A	08/18/89	2317

RE hB = Metrod Blank

N H = Native TCDB Spike

D = Publicats/Fortified Field Blank

PE PE = EMBL-LV Performance Evaluation Sazole
MPC PPC = Maximum Prescribe Concentration

FE = Field Blank

IS = Internal Stanzard

ER = Resur

NO = Not Detected

FEFF 8-18 TODE SOIL DATA REPORT FORM Page 8 of 8

Lac: TMS ANALYTICAL SERVICES

Recort Cate: V8/19/98

CASE:HER07:25 ISOMER SPECIFIC

Column: SP2321: 50\* % 1.25

TEBMER BREGIFTO FOR 8.8.7.8-7001

Instrument ID: HP 5970MSD

CLIENT	. Relative .Resconse Ratios					. Resconse (Area)								
Sagole Number	:	329/ 322	•	332/ 334!3	:	:	250	320	322	328	33215	33415		
NH2023		0.82		0.72		,		22403	27347	21111	*3255	82077		
EBASHW		0.59		0.83			14333	43252	c24±3	35918	74512	89752		
WHE?ES		0.71		0.78			24333	68795	97:79	111108	133842	177559		
WH2029		0.80		0.73			14c7E	24345	30553	54940	106349	136945		

MB = Hethod Blank

N = Native TCDD Spike

D = Duclicate/Fortified Field Plank

PE = EMS1-LV Performance Evaluation Sample

MPC = Maximum Possible Concentration

FB = Field Blank

IS = Internal Stancard

R9 = Rerun

ND = Not Detected

RS = Recovery Standaro

FORM 8-15 TODE SOIL DATA REPORT FORM

Fage 1 of 2

Lab: THE ANALYTICAL SERVICES

Report Date: 08/19/89

CASE: HEP07120 ISSMER SPECIFIC

Column: SF8391; 664 X 0.85

ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sarcie Mumber	Extr. Cate	Het Wt.	ug/kg Meas.	TCDD MPC	SC/MS Date	Analysis Time	
445031	^E/10/89	5.04	2.73	N/A	08/18/89	2353	
RH5035	07/12/88	4.82	2.67	N/4	08/19/88	6659	
NH5035	07/12/88	4.93	2.53	N/A	08/19/88	0059	
WH2037	07/12:89	4.94	1.26	N/A	09/19/88	0133	
RH5038	07/12/88	5.00	1.81	N/A	08/17/88	0205	
MF5034	07/12/88	4.85	1.33	N/A	08/19/88	0530	
HH2040	07/12/29	5.16	1.85	N/A	08/19/88	0312	

M9 | F9 = Fathed Plank

N N = Native TCDD Spike

D = Duplicate/Fortified Field Blank

PE PE = EMSL-LV Performance Evaluation Sample

MPC MPC = Marinum Fossible Concentration

F8 = Field Plank

IS = Internal Standard

FR = Perur

ND = Not Detected

FORM 8-15 TODO SOIL DATA PEPORT FORM

Page 2 of 2

Lab: THS AMPLYTICAL SERVICES

Report Date: 08/19/88

CASE: HERO712C ISOMER SPECIFIC

Column: SP2331; 60M X 0.25

ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

C. 1541	. Relative .Pesconse Ratics					. Response (Area)								
CLIENT Sample Number	:	356,	•	332/ 334[9	,	•	259	350	322	358	33518	334IS		
WH2031		0.81	•	0.82	,		19237	56768	70068	47594	93478	114407		
RH3035		0.79	٠,	0.84			43708	164015	207313	126777	5cF5P8	353292		
MH5633		0.76		0.85			20371	56132	74100	50872	108547	125515	•	
842037		0.71		0.84			19213	47271	56579	88465	187769	222919	_	
NH5039		0.74		0.79			39931	109606	147783	135852	281492	358637	·	
WHE039		0.74		0.79				65446	88056	114791	234857	299055		
WH2949		0.79	٠.	0.77				117355	148472	133285	273478	354366		

MB = Method Blank

M = Mative TCDD Soils

D = Duclicate/Fortified Field Plank

PE = EMSL-LV Performance Evaluation Sample

MPC = Maximum Possible Concentration

FP = Field Blank

IS = Internal Standard

RP = Rerun

ND = Not Petected

FORM E-18 TODO SGIL DATA REPORT FORM

Fage 1 of 2

Lab: THE ANALYTICAL SERVICES

Report Date: (8/19/98

CABE:hER07144 IEDMER ERECIFIC

Inlumn: 998881: 60M I ..25

ISOMER SPECIFIC FOR 2.3,7.9-7000

Instrument ID: -> E570MSD

CLIENT Sample Number	Extr. Date	Wet Wt.	uç/kg Meas.	TCDD MPC	GC/MS Date	Analysis Time	
JH2057D	07/14/88	5.88	1.18	A/K	09/19/88	2346	
WH2059D	07/14/88	4.89	1.23	B/A	09/19/88	0419	
HH2059	07/14/88	5.11	0.95	H/A	08/19/88	0453	

MB M2 = Method Blank

N = hative TCDP Spike

D E = Dublicate/Fortified Field Blank

PE FE = EMSL-LV Performance Evaluation Sample

MPC MPC = Maximus Possible Concentration

FB = Field Blank

IS = Internal Standard

RR = Rerun

ND = Not Desected

FORM E-18 | TODD SDIL DATA REFORM FORM | Fage B of B

Lab: THE AMALYTICAL BERVICES

Febort Pate: 08/19/88

CASE: MERG714A 180\*E\* SFECIFIC

Column: 9-8331: e0\* 1 3.25

TERMER SPECIFIC FOR E.S.T.S-TORD

Instrument ID: HF 5970MSD

CLIENT	. Relative .Resoonse Ratios					. Resconse (Area)								
Saeple Number		320/ 322	•	332/ 33415		. 259	320	355	328	33512	33415			
NH2057C NH205ED NH2059	•	0. <b>81</b> 0.7 <del>9</del> 0.80		0.78 0.81 0.80		. 74771 . 67755 . 56269	141842 180717 123522	175391 229485 152523	245145 298939 255964	542 <b>933</b> 688159 872676	698788 850179 717210			

MB = Method Blank

N = hative TCDD Sorke

D = Bublicate/Fortified Field Plany

PE = EMSL-LV Performance Evaluation Sample

MPC = Max: muc Possible Concentration

FB = Field Blank

IS = Internal Standard

RR = Rerur

ND = Not Detected

HELUT 1-1-1- --

FORM B-18 TODD BOIL DATA REPORT FORM

Page 1 of 2

Lab: THE ANALYTICAL SERVICES

Report Date: 08/19/88

CASE: HERO720A ISOMER SPECIFIC

Column: SP2331: 604 X 0.85

ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HF 5970MSD

 CLIENT Sample Number	Extr. Date	Wet wt.		TCOE MPC	EC/MS Date	Asalysis Time	
 WH2042	07/20/98	5.08	0.65	N/A	08/19/98	 0 <b>52</b> 5	

MB = Method Blank

N = Native TCDD Spike

D = Duplicate/Fortified Field Blank PE PE = EMSL-LV Performance Evaluation Sample

MPC MPC = Maxigum Possible Concentration

FB = Field Blank

IS = Internal Standard

RR = Rerun

ND = Not Detected

FORM 8-18 TOOM SOIL DATA REPORT FORM

Page 2 of 2

Lab: THS ANALYTICAL SERVICES

Recort Date: 08/19/88

CASE: PEPO7EOA ISOMER SPECIFIC

Column: SF2331; 60H X 0.25

ISOMER SPECIFIC FOR 2.3.7,8-1000

Instrument ID: HP 5970MSD

CLIENT	. Relati			_		. Response (Area)									
Sample		320/ 322	-		•	:		320	322	328	33215	334IS `			
WH2042		0.86		0.80			E5703	74042	92909	E27920	506538	£55553			

MB = Method Blank

N = Native TCDD Spike

D = Duplicate/Fortified Field Blank

PE = EMSL-LV Performance Evaluation Sample

MPC = Maximum Possible Concentration

FB = Field Blank

IS = Internal Standard

RR = Rerun

ND = Not Detected

FRAM B-18 TODD SOIL DATA REPORT FORM Page 1 of 2

Lab: IMS ANALYTICAL SERVICES

Recort Date: 03/19/88

CASE: HEPOTESA ISOMER SPECIFIC

Orluen: E98831: 60% X 0.85

ISOMER SPECIFIC FOR 2.3.7.8-TODD

Instrugent ID: HP 5770MSD

CLIENT								
Sasole Number	Extr. Date	Wet Wt.	ug/kg Meas.	T <i>edd</i> MPC	80/MS Date	Amalysis Ti <b>as</b>	·	
₩#2221 #42222	07/26/88 07/36/88	5.26 5.01	1.41		08/19/88 08/19/86		NOW 2,3.7.8 ISOMER	S PPESENT

ME MB = Method Plank

N = Native TCDD Scike

D = Dublicare/Fortified Field Plank

PE PS = EMSL-LV Performance Evaluation Sample

MPC MPC = Maximum Possible Concentration

FB = Field Flank

IE = Internal Standard

RP = Rerun

ND = Not Detected

FORM B-12 | TODO SOIL DATA REPORT FORM | | Page E of 2

Laz: TMS ANALYTICAL SERVICES

Pepart Date: 08/19/88

CASE: "EROTEGA ISC"ER EFECIFIC

Splumm: 892391: 66M Y 0.25

ISCHER SPECIFIC FOR 8.3.7.8-7555

Instrument 10: HP 5970MSE

CLIENT	.;	Rela		-		. Response (Area)								
Sample Number	-			382/ 38418		:		320	325	358	35515	33419		
WH2221 WH2833		0.73 9.69	-	0.77 0.81	•			159901 235972		919290 35916B	4=9241 692290	646536 859603		

MB = Method Blank

N = hative TCDD Scike

D = Duplicate/Fort:fied Field Blank

PE = EMSL-LV Performance Evaluation Sample

MPC = Maximum Possible Concentration

FF = Field Blank

IS = Internal Standard

RR = Rerun

ND = Not Detected

FORM 9-15 TODE SOIL SATA REFORT FORM

Face 1 of E

Lab: THE ANALYTICAL ESTVICES

Record Date: 38:19/89

CASE: HEROTELS LEBMER SPECIFIC

Column: E52351; 60M # 1.25

ISOMER ERECIFIC FOR 2.3,7.8-TCDD

Instrument ID: HP 5970MSD

CLIENT							
Sample Number	Extr. Date	Wet Wt.	ug/kg Meas.	TCDD MPC	SC/MS Bate	Analysis Time	
WH2258 WH2257	07/26/88 07/26/88	5.0 <b>6</b> 5.11	1.74 0.96	N/A N/A	09/19/88 08/19/89		

MB = Mathod Plank **H**=

t = Native TODE Scike

D = Duplicate/Fortified Field Flank PE FE = EMSL-LV Performance Evaluation Easpie

PFC PFC = Maximum Fossible Concentration

FB = Field Blanc

IB = Internal Etanderd

RR = Rerun

NI = Not Detected

FORM 9-1S | TEDD SOIL DATA REPORT FORM | Page E of E

Lab: "\*8 ANALYTICAL SERVICES

Report Date: 03/19/89

DASE: HEROTEAE ISOMER SPECIFIC

Column: 272331: 60% % C.25

ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HF 5970MSD

CLIENT	. Relati	-	•		· ,			
Sample Humber		332/ . 3341S .	. 259	320	355	328 33215	33415	
kH2258 HF2259	. 0.87 .		. 171276	-		1658 <b>37</b> 33597 361616 85373		

MB = Method Flank

N = Native TCDD Score

D = Dublicate/Fortified Field Blank

FE = EXEL-Ly Performance Evaluation Semble

MFC = \*exicut Fossible Concentration

FB = Field Blank

IE = Internal Standard

RR = Remun

ND = Not Detected

FORM B-1S TODD SBIL DATA REPORT FORM Page 1 of 2

Lab: THE ANALYTICAL SERVICES

Report Date: 08/24/88

CASE: HEROELIA ISOMER SPECIFIC

Column: SP2331; 60% X 0.25

ISOMER SPECIFIC FOR 2,3,7,8-1000

Instrument ID: HP 5970MSD

CLIENT Sample Number	Extr. Date	Wet Wt.	ug/kg Meas.	TCDD MPC	GC/MS Date	Analysis Time	
WH2321	08/11/88	4.98	1.88	N/A	08/22/89	1735	
WHEBEE	08/11/88	5.14	3.65	N/A	08/22/89	1809	
#SESHW	08/11/88	4.96	2.30	N/A	03/22/69	1842	
WH2325	08/11/89	4.92	2.66	N/A	08/22/88	1915	
MH5359	08/11/88	4.94	10.92	N/A	08/22/89	1949	
WH2327	08/11/88	4.89	5.76	N/A	08/22/88	2021	
WH2329	08/11/28	5.0i	12.32	N/A	08/22/88	2054	
WH2329	08/11/88	5.02	3.34	N/A	08/22/88	2127	
MH5330	08/11/88	4.94	3.19	N/A	08/22/88	2201	
MH5335	08/11/88	5.10	2.78	N/A	08/22/89	2234	
MH5333	08/11/88	4.99	4.80	N/A	08/23/89	0013	

MB = Method Blank

N N = Native TCDD Soike

D = Duplicate/Fortified Field Blank

PE PE = EMSL-LV Performance Evaluation Sample

MPC MPC = Maximum Possible Concentration

F3 ≈ Field Blank

IS = Internal Standard

RR = Rerum

ND = Not Detected

FORM B-1S TCDD SOIL DATA REPORT FORM Page 2 of 2

Lab: TMS ANALYTICAL SERVICES

Report Date: 08/24/88

CASE: HEROSILA ISOMER SPECIFIC

Column: SP2331; 60% X 0.25

ISCHER SPECIFIC FOR 2.3.7.8-TODD

Instrument ID: HP 5970MSD

 Relative Response Ratios Response (Area) CLIENT . 320/ . 332/ . Sagole . 322 . 33415 . . 259 320 322 328 Number 33215 33415 . 61812 206933 250835 214916 485687 617621 0.82 . 0.79 . NH2321 
 0.81 .
 0.79 .
 .
 70724
 232562
 287249
 121558

 0.79 .
 0.79 .
 .
 46012
 154001
 195082
 134630

 0.79 .
 0.78 .
 .
 55394
 184924
 233465
 140747
 MH5355 274972 348713 304993 394781 WH2324 WH2325 315768 403166 B4905 124939 156763 WH2326 0.76 . 0.80 . 291352 383660 58903 . 128633 332584 417332 398652 539990 151747 WH2327 0.74 . 0.80 . . 71065 258500 . 0.88 . 0.78 . 88033 112990 -MH5358 292735 43318 . 59253 180061 227686 112231 243489 304695 WH2329 0.79 . 0.80 . 109542 134700 . 0.78 . . 28213 74856 96314 47665 NH5330 0.81 . . 67993 178263 217335 124253 WH2332 . 0.82 . 0.81 . 280687 348431 WH2333 . 0.78 . 0.79 . . 96282 297691 379606 128297 281553 355089

MB = Method Blank

N = Native TCDD Spike

D = Dublicate/Fortified Field Slank

PE = EMSL-LV Performance Evaluation Sample

MPC = Maximum Possible Concentration

FB = Field Blank

IS = Internal Standard

RR = Rerun

ND = Not Detected

## FORM B-1S TODD SOIL DATA REPORT FORM

Page 1 of 2

Lab: TMS ANALYTICAL SERVICES

Report Date: 08/24/88

CASE: HERO812A ISOMER SPECIFIC

Column: SP2331; 60M X 0.25

ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Extr. Date	Wet Wt.	ug/kg Heas.	TCDD MPC	GC/HS Date	Analysis Time	
WH2353	08/12/88	5.13	7.16	N/A	08/23/88	0047	
WH2355	08/12/89	4.96	11.65	N/A	08/23/88	0153	
WH2357	08/12/88	5.19	5.10	N/A	08/23/88	9520	

..... - 2585 esp. 1. - 1286 - 1286 - 1286

MB MB = Method Blank N M = Native TCDD Soike

D = Duplicate/Cortified Field Blank

PE PE = EMSL-LV Performance Evaluation Sample

MPC MPC = Maximum Possible Concentration

FB = Field Blank

IS = - Internal Standard

RR = Rerun

ND = Not Detected

FORM B-1S | TCDD SOIL DATA REPORT FORM | Page 2 of 2

Lab: THS ANALYTICAL SERVICES

Report Date: 08/24/88

CASE: HEROBIZA ISDMER SPECIFIC

Column: SP2331; 60M X 0.25

ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT	. Relat	ive Ratios	,		Response (Area:	
Sample Number		. 332/ . . 33419 .	. 259	320 322	328 33215	33415
WH2353 WH2355 WH2357	. 0.80 . 0.77 . 0.78	. 0.79 .	. 107255 . 166065 . 64084	370169 464381 580332 749858 227259 290012	100291 223270 104862 228157 85012 192740	298199 290349 246959

MB = Method Blank

N = Native TCDD Spike

D = Duplicate/Fortified Field Blank

PE = EMSL-LV Performance Evaluation Sacole

MPC = Maximum Possible Concentration

FB = Field Blank

IS = Internal Standard

RR = Rerun

ND = Not Detected

FORM B-1S TCCD SOIL DATA REPORT FORM

Page 1 of 2

Lab: THS ANALYTICAL SERVICES

Recort Date: 08/24/88

CASE: HERC912B ISOMER SPECIFIC

Column: SP2331; 60M X 0.25

ISDMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument IB: MP 5970MSD

CLIENT Sample Number	Extr. Date	Wet Wt.	ug/kg Maas.	TCDD 1998	GC/MS Date	Analysis Time	
WH2371	08/12/88		54.73	N/A			

B

N Y = Native TCDD Spike

D = Duplicate/Fortified Field Blank

PE PE = EMSL-LV Performance Evaluation Sample

MPC MPC = Maximum Possible Concentration

FB = Field Blank

IS = Internal Standard

RR = Rerun

MD = Not Detected

FORM 8-15 TCDD SOIL DATA REPORT FORM Page 2 of 2

Lab: THS ANALYTICAL SERVICES

Report Date: 08/24/88

CASE: MEROBI2B ISOMER SPECIFIC

Column: SP2331; 60M X 0.25

ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

 Relative Response Ratics Response (Area) CLIENT Sample . 320/ . 332/ . 320 322 328 33215 33415 . 322 . 334IS . . 259 WH2371 . 0.82 . 0.81 . . 879594 3217719 3741540 151116 261507 321688

MB = Method Blank

N = Mative TCDD Scike

D = Duplicate/Fortified Field Slank

PE = EMSL-LY Performance Evaluation Sample

MPC = Maximum Possible Concentration

FB = Field Blank

IS = Internal Standars

RR = Rerun

ND = Not Detected

## FORM 5-18 TOOM SOIL DATA PEFERT FORM Page 1 of 2

Lab: TMS AMALYTICAL SERVICES

Resort Date: 19/24/89

CARE: MEFORITA ISBNER SPECIFIC

Column: SP2221: 56M x 0.35

ISCMER SPECIFIC FOR 2,3,7.9-TCDD

Instrument ID: HP 5970HSD

CLIENT Samole Number	Extr. Date	het Nt.		G331 29K		Analysis Time
WHE975	08/15/89	5.11	1.23	N/A	08/23/88	0405
WHE975	08/15/93	5.07	1.29	N/A	08/23/89	
WHE877	08/15/88	5.37	1.34	N/A	08/23/88	

M9 .X9 = Method Blank 

FE PE = EMEL-LY Performance Evaluation Sapple

MRC MRC = Maximum Possible Concentration

FB = Field Blar\*

IR = Internal Etancano

44 = 4arun

VD = Not Datacted

55 = Sacovery Standard

FORM 8-18 TODD BOIL DATA REPORT FORM Fags 2 of 2

Lab: THE ANALYTICAL BERVICES

ı

Pesart Date: 08/24/88

CASE: HERCEISA ISCHER SPECIFIC

Column: SFE391: 60M # 0.85

ISSMER SPECIFIC FOR 2,2,7,2-7000

Instrument ID: 4P 5970MSD

CLIENT	.,,	. Pelative .Response Patios				. Resconse (Area)							
Saacie Number		320/ 322			-		259	320	322	328	33218	38419	
WH2875 WH2975 WH2977	•	0.84 0.79 6.79		0.79 0.78 0.80		·	25827	24435 74518 77895	41035 95954 99942	51735 112724 114913	117641 255711 252068	151417 322216 322499	

ME = Method Slank

N = Native TCOD Equie

I = Outlicate/Fortified Field Slang

PE = EXEL-10 Performance Evaluation Sample

MPC = Maxicum Possible Compensation

FB a Field Blan.

18 = Internal Etandant

AA z Perun

10 = Hot Catacted

PB # Recovery Standard

FORM SHIE TODD SDIL DATA REPORT FORM Fage 1 of 8

Lab: TME ANALYTICAL BERVICES

Paport Date: 8/24/88

CASE: PEFESTA

Collan: 892931: 505 % 0.25

ISBYER SPECIFIC FOR E.S.7.8-TOTE

Instrument ID: PP 5971MEE

CLIENT						
Sanole	Extr.			TEED		Araiveis
yesser	Date	Seel Mt.	Xeas.	MPC	Date	Tite
METHOD BLANK	(3/22/38	E.00	3.00	0.14	08/23/28	17:24
SOIL BLANK	09/83/89	5.00	0.00		09/23/38	
SOIL SPIKE	09/23/38	5.00	0.75	N/A	05/23/38	18:30
831F 4E+8	08/23/98	5.00	3,42	N/A	13/23/89	19:03
981974	(9/22/99	5.04	1.11	N/A	03/83/68	15:35
WHE051	09/23/82	5.00	1.09	5/4	03/22/98	80:13
#H2053	09/23/65	5.11	0.87	A\E	09/23/39	Ē0:41
WHE125	68/23/98	5.15	5.97	N/A	08/23/98	E1:14
¥H2127	05/23/29	5.00	2.08	N/A	(9/23/58	21:47
WH2125	09:23/88	5.14	4.51	4/4	08/23/88	22:20
WHEEE	09/23/29	4.9E	1.07	N/A	09/23/98	22:53
WHESTS	05/83-89	5.00	1.55	A/E	08/23/83	23:59
F45335	08/23/29	5.95	5.44	M/A	02/24/88	00:32
HH2514	09/23/23	5.11	3,)9	N/A	08/24/88	01:05
WHEB17	00/31/65	4.93	3.25	N/A	09/24/98	01:35
#H5315	08/E3/89	E.11	3.95	h/A	02/24/38	02:11

*2	,*3 =	"stntt	37474	
4	': =	ially:	TCCC Edike	
-	_			

FB = Field Plans

18 = Intarnal Etandano eq a Petur

1 1 = Indicate Fortified Field Side
PE FE = EMELTAL Performance Evaluation Section
PO MPC = Maximum Possible Indicatoration

MI = Not Detacted

Islam: 658881/ 60% f 0.85

ISCHER ERSCIFIC FOR E.S.C.8-TODD

Instrument ID: HP 5970481

CLIENT	. Relative .Fesconse Ratios					, Fesconse (Area)							
Sazale Nuecer		329/ 3 <b>2</b> 5		332, 332,			£57	320	322	329	33218		
		ERR				,				69774	161785	204811	
BOIL BLANK		erf.		0.77			-	-	-	57753	1-2555	185100	
SOIL SPIKE		0.75		0.79			*	28300	37951	84755	175375	555723	
SBIT NE-B		0.77		0.78			33555	107903	1394"4	42024	4274	192375	
H1474		0.81		0.81			Ť	26359	35150	47345	113995	141435	
¥+2051		0.79		0.20		4	_	35374	44650	61355	14663	183750	
WHEC45		0.73		0.76			-	9229	12573	20393	47739	68214	
WH2126		0.82		0.77			27794	119100	14510á	40619	34072	102791	
WH2137		0.79		0.79			25576	59359	88051	70108	150308	196738	
WH2123		0.85	,	0.20		•.	56304	177425	209447	73376	:63429	2(4489	
#H553F		0.67		9.76				60034	89991	119783	275538	351090	
WH2365		0.27		0.77			+	65211	74653	71309	150451	194951	
#HE305		0.87		0.90			34172	106304	181885	81694	154355	231741	
4h23!+		0.97		0.81			39043	95483	107461	60613	131225	151454	
4F22:7		2.29		).92			29233	111973	125354	65457	150033	183573	
%#221E		0.91		3.81	,		55397	137139	170210	71440	:57293	194571	

MS = Mathor Elank

N = Mative TOSS Bodre

P = Bublicate/Firtified Field Black

PE = EmElycur Performance Elecustra: Section

MPC = Maximum Possible Directoration

59 = Field Hark

18 = Internal Standard

es e Sarum

vi = Not Decestes

FORM B-IS TODD SOIL DATA REPORT FORM

Page 1 of 2

Lab: THS ANALYTICAL SERVICES

Report Date: 09/08/89

HERC250A ISOMER SPECIFIC

Column: SP2331; 60M X 0.25

ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Samole Number	Extr. Date	Het Wt.	ug/kg Meas.	TCDD MPC	GC/KS Date	Analysis Time	
2016	09/06/89	10.14	0.16	N/A	09/06/88	1918	
2019	09/06/89	10.05	1.79	N/A	09/05/88	1950	
2021	09/06/88	10.13	1.98	N/A	09/05/88	5053	
5055	09/06/E3	10.14	1.68	A/R	09/06/88	8056	

MB MB = Method Blank

N N = Native TCDD Scike

D = Duplicate/Fortified Field Blank

PE PE = EMSL-LV Performance Evaluation Sample

MPC MPC = Maximum Possible Concentration

FB = Field Blank

IS = Internal Standard

RR = Rerun

ND = Not Detected

FORM B-15 | TODD SOIL DATA REPORT FORM

Page 2 of 2

Lab: TMS ANALYTICAL SERVICES

Report Date: 09/08/88

HERCESOA ISCMER SPECIFIC

Column: SP2331; 60M X 0.25

ISOMER SPECIFIC FOR 2,3,7,8-TCDP

Instrument IP: HP 597(MSD

CLIENT	. Re	. Relative .Response Ratios										
Sample Number	•	320/ 322		332/ 33415	•	. 259	320	355	328	33215	334IS	
2016		0.79		0.77		. 90	27858	35129	251542	827625	1070479	
2019		0.73		0.79		. 463	23 148946	203097	177995	425423	541045	
2021		0.90		0.78		. 475	72 159765	179174	156992	365055	467855	
2022		0.74		0.79		. 464	09 151979	218375	213191	487405	617405	

MB = Method Blank

N = Native TCDD Spike

D = Duplicate/Fortified Field Blank

PE = EMSL-LY Performance Evaluation Sample

MPC = Maxisum Possible Concentration

FB = Field Blank

IS = Internal Standard

RR = Rerun

ND = Not Detected

RS = Recovery Standard

NO = Not Quantitated

FORM 8-15 TODE SOIL DATA REPORT FORM

Fage 1 of 2

Lab: THE AVALYTICAL SERVICES

Report Date: 09/08/89

HERCESIA ISOMER SPECIFIC

Column: SP2331; 60% X 0.25

ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Extr. Date	Wet Wt.	ug/kg Meas.	TCDD MPC	6C/MS Date	Analysis Tipe		
MB	09/06/88	10.00	0.00	0.17	09/07/BB	1925		
SB	09/06/82	10.00	0.00	0.22	09/07/88	1958		
FE-A	09/05/89	5.00	0.96	N/A	09/07/89	2031		
2927	09/05/83	10.00	2.79	N/A	09/07/88	2104	•	
5040	09/06/99	10.00	1.42	N/A	09/07/88	2136		
55	09/05/88	10.00	0.94	N/A	09/07/88	2209		
2095	07/05/88	10.05	1.16	N/A	09/07/88	2242		
2107	09/06/88	10.10	0.78	N/A	09/07/28	2315		
2590	09/0£/BB	10.20	1.15	N/A	09/09/88	0232		
2261	09/06/88	10.07	1.32	N/A	09/09/89	0305		
5595	98190140	10.11	1.45	N/A	09/03/88	0338		
2295	09/05/88	10.18	0.33	N/A	07/08/88	0410		
2307	09/05/88	10.04	1.69	N/A	07/09/88	0443		

M9	M9 =	Method Blank	FB =	Field Blank
N	N =	Native TCDD Spike	15 =	Internal Standard
Ð	D =	Duplicate/Fortified Field Blank	RR =	Rerun
PE	PE =	EMSL-LV Performance Evaluation Sample	t1D =	Not Detected
MPC	MPC =	Maximum Possible Concentration	RS =	Recovery Standard

Lab: THS ANALYTICAL SERVICES

Report Date: 09/08/88

HERC251A ISOMER SPECIFIC

Column: SP2331; 50M X 0.25

ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT	. Relative .Response Ratios				. Response (Area)								
Sample Number		320/ 322	•	332/ 334IS	•		259	320	322	328	33215	33415	
		JLL	·		•								
MP		ERR		0.74						247194	558067	749978	
58		ERR		0.78						194449	446494	569987	
PE-A		0.80		0.78			ND	56045	70280	124835	284404	365543	
2027		0.78		0.79			69916	235118	303316	180506	420671	533289	
2060		0.67		0.78			55107	198779	287825	324320	740418	947189	
55		0.64		0.79			41473	109488	130870	306651	623217	789052	
2095		0.80		0.79			51493	125013	157681	241605	531049	673119	
2107		0.76		0.80			45176	129587	171487	357993	832741	1046660	
2260	•	0.81		0.80			58455	190975	234972	333970	801326	1001701	
2261		0.84	٠	0.77			104805	191165	215992	326145	642439	830022	
5595		0.76		0.82			61297	157123	205940	249052	553370	673921	
5586		0.85		0.77			HD.	36727	43269	237560	514532	665994	
2307		0.76		0.20			40821	158646	221003	223002	506154	433439	

MB = Method Blank

N = Native TCDD Spike

D = Duplicate/Fortified Field Blank

PE = EMS1-LV Performance Evaluation Sample

MPC = Maximum Possible Concentration

FB = Field Blank

IS = Internal Standard

RR = Rerun

ND = Not Detected

FORM 3-19 TODD BOIL DATA REPORT FORM

Page 1 of 2

Lab: THE SMALYTICAL SERVICES

Secor: Date: 09/09/88

HERCESTA LEGMER SPECIFIC

Column: SFEER:: 50M t 0.2E

- ... Gradain ava ( 0.11

Instrument IE: HP 5976MSB

ISOMER SPECIFIC FOR 2.3.7.9-7000

Casole Yuster	Extr. Date	Wet Wt.	uç/kg Meas.		31/#5 Date	Amalysis Tire
2:20	09/05/83	10.11	11.84	N/4	 ?9/13/89	1226
2121	09/08/88	10.10	7.58	N/A	09/13/68	1301
2005	09/05/68	10.20	0.29	N/A	50/12/52	1232
2203	09/05/89	10.07	0.97	378	(5/13/68	1416
2257	09/06/99	10.00	1.05	7/4	(-2/13/55	1-39

MB MB = Method Slank

N N = Native TODD Spike

D B = Quoiscate/Fortsfied Field Flank

PE FE = EMBL-1/ Ferformance Evaluation Pagola

MFC MFC = Maximus Possible Concentration

FB = Field Blank

IS = Internal Standard

RR = Rerun

ND = Mor Datebres

RS = Recovery Esandars

FORM 9-18 TODD SOIL DATA REPORT FORM Face 8 of 8

Lab: THS ANALYTICAL SERVICES Record Date: 19/08/88 -

MERCRETA ISCHER BREGIFFO Column: GREEN: BOM 1 0.85

180MER 69201910 FOR 2.3.7.8-7000

Instrument ID: HP 5970MSE

CLIEAT	. Relative .Response Ratios			. , Response (Anga)									
Sample Number		320/ 322	•	332/ 334!\$	•		259	320	388	229	32818	38416	
212)		9.77		0.78	,		430+13	1591555	3984868	25834!	652751	847:31	
2121		0.75		0.53			146309	546524	715365	1814(4	355550	433615	
2208		0.84		0.20			27374	25142	21102	182415	42149	535501	
5505		0.75		0.72			49255	79739	105315	185509	392097	546367	
2537		0.57		0.79			90032	508645	311773	140225	1052101	1825187	

MB = Method Plank

N = Native TCDD Soike

W = 4561A6 1CDD 20148

D = Eurlicase/Fortifies Field Blank

PE = EMSI-LY Performance Evaluation Eacole

MPC = Maximum Possible Joncertration

FB = Field 3lank

IS = Internal Standard

RR = Recon

NE = Not Estectat

FORM B-1S TODO SOIL DATA REPORT FORM

Page 1 of 2

Lab: TMS ANALYTICAL SERVICES

Peport Date: 09/20/88

HERCO819A ISOMER SPECIFIC

Calumn: SF2331: 60M X 0.25

ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Extr. Date	Het Wt.	ug/kg Meas.	TCDD MFC	GC/MS Date	Analysis Time	
2316	07/28/88	5.08	2.69		08/19/88	1857	

MB MB = Method Blank

N N = Native TCDD Spike

D = Duplicate/Fortified Field Blank

PE PE = EMSL-LV Performance Evaluation Sample

MPC MPC = Maximum Possible Concentration

FB = Field Blank

IS = Internal Standard

RR = Rerun

ND = Not Detected

FORM B-15 TODO SOLL DATA REPORT FORM Page 2 of 2

Lab: IMS ANALYTICAL SERVICES

Report Date: 09/20/88

HERCOBITA ISONER SPECIFIC

Column: SP2331: 60M X 0.25

ISOMER SPECIFIC FOR 2.3.7.8-TCDD

 $\bigcirc 1$ 

Instrument ID: HP 5970MSD

CLIENT	. Relative .Response Ratios				•									
Sample Number	•			332/ 33415		:	259	329	722	328	33215	33415		
2316		0.89	7 .	0.87	•		₩₽	42696	47708	26546	59807	80676	 	

MB = Method Blank

M = Mative TCDD Spike

0 = Duplicate/Fortified Field Blank

PE = EMSL-LV Performance Evaluation Samole

MPC = Maximum Possible Concentration

FB = Field Blank

IS = Internal Standard

RR = Rerun

ND = Not Detected

PS = Recovery Standard

NQ = Not Quantitated

FORM B-IS TODO SOIL DATA REPORT FORM

Page 1 of 2

Lab: THS ANALYTICAL SERVICES

Report Date: 09/20/88

HERCO919A ISONER SPECIFIC

Coluan: SP2331: 60M X 0.25

ISOMER SPECIFIC FOR 2,3,7.8-TCDD

Instrument ID: HP S970MSD

CLIENT							
Sample Number	Extr. Date	Wet Wt.	ug/kg Meas.	TCDD MPC	GC/MS Date	Analysis Time	
2354		9.78	6.52		09/19/BB		************************

PE PE = EMSL-LY Performance Evaluation Sample

MPC MPC = Maximum Possible Concentration

FB = Field Blant

IS = Internal Standard

RR = Rerun

ND = Not Detected

FORM 8-15 TODO SOIL DATA REPORT FORM Page 2 of 2

Lab: TMS ANALYTICAL SERVICES

Report Date: 09/20/88

HERCO919A ISOMER SPECIFIC

Column: SF2331; 60M X 0.25

ISOMER SPECIFIC FOR 2.3.7.8-TCDD

Instrument ID: HP 5970MSD

CLIENT	. 1	, Relative .Response Ratios					. Response (Area)							
Sample Number				332/ 33415		•	259	320	322 -	328	33219	33415		
2354		0.78	· .	0.79		<b></b>	77620	270860	357104	₩Ð	214633	272213		

MB = Method Blank

N = Native TCDD Spike

D = Dublicate/Fortified Field Blank

PE = EMSL-LV Performance Evaluation Sample

MPC = Maximum Possible Concentration

FB = Field Blank

IS = Internal Standard

RR = Rerun

ND = Not Detected

RS = Recovery Standard

NQ = Not Quantitated